SMOKING AND PREGNANCY: RECONCILING INCOMPATIBILITIES

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SMOKING AND PREGNANCY; RECONCILING INCOMPATIBILITIES

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Smoking during pregnancy is a major public health problem that endangers the mother and her fetus. Postpartum smoking is a continuing threat to both mothers and children. The purpose of this interpretive research was to develop a substantive grounded theory based on the experiences of mothers who have smoked, stopped smoking during pregnancy, and made difficult choices about resuming or not resuming smoking after childbirth. Seventeen pregnant and postpartum women age 18 and older who had smoked prior to their pregnancy and quit smoking during their pregnancy participated in semi-structured interviews. Two additional participants clarified the historical perspective concerning pregnant women smoking. Data were simultaneously collected, coded and analyzed using theoretical sampling and the constant comparative method. Women described their relationship to smoking as a kind of love story, a relationship that they were reluctant to give up in spite of the fact that they were pregnant. The basic social psychological problem that emerged from

the interviews was "imposed smoking restrictions during pregnancy." The restrictions derived from the social taboo of smoking while pregnant. Significant others, family, friends, health care providers, and the media were the cultural messengers of the taboo. In response to the problem the participants reconciled the incompatibilities of smoking and pregnancy by focusing on the baby, struggling, strategizing, concealing, and pausing. The imposed restrictions against smoking while pregnant evolved to imposed restrictions against smoking around the baby during the postpartum period. The incompatibility of smoking around the baby was reconciled by following rules for smoking or choosing new priorities incompatible with smoking. Following rules for smoking minimized smoke exposure and smoking smells near the baby. Choosing new priorities incompatible with smoking--choosing to be a good mother and/or to face smoking as an addiction--permitted the mother to maintain smoking cessation in the postpartum period. The proposed grounded theory forms the basis for specific interventions aimed toward more effective sustained abstinence strategies for pregnant and postpartum women.

CHAPTER 1
INTRODUCTION

Smoking during pregnancy is a major public health problem that endangers women and their fetuses. Approximately 14% to 20% of pregnant women in the U.S. smoke and prevalence is even higher in women from lower socioeconomic groups and among some ethnic minorities (Muramoto et al., 2000; Woodby, Windsor, Snyder, Kohler, & DiClemente, 1999). More than 140,000 women die yearly as a result of smoking-related diseases (Husten, Chrismon, & Reddy, 1996). Diseases in women that are attributable to cigarette smoking include cervical cancer, osteoporosis, decreased fertility, and earlier menopause (Mitchell, Sobel, & Alexander, 1999).

Smoking is the foremost preventable cause of perinatal morbidity and mortality (Ershoff et al., 1999). More than half a million infants per year experience intrauterine cigarette smoke (Wakschlag, Leventhal, Cook, & Pickett, 2000). Statistics show that cigarette smoking is responsible for 19,000 to 141,000 spontaneous abortions, 32,000 to 61,000 low birth weight births, 1,900 to 4,800 infant deaths from perinatal disorders, and 1,200 to 2,200 deaths from Sudden Infant Death Syndrome (SIDS) (Husten, Chrismon, & Reddy, 1996). Intergenerational health consequences of maternal smoking may also occur (Wakschlag et al., 2000).

The impact of serious health complications associated with smoking during pregnancy and the postpartum period has prompted the inclusion of smoking cessation and relapse prevention into the national health objectives for pregnant and postpartum

women in the "Healthy People 2000" campaign (U.S. Dept. of Health and Human Services, 1991). Smoking associated with pregnancy is also emphasized in the clinical practice guidelines for treating tobacco use and dependence by the U.S. Department of Health and Human Services (2000). Only 30% to 50% of pregnant smokers actually stop smoking during pregnancy and of those 60% to 70% resume smoking within one year after delivery (Valanis et al., 2001). Postpartum relapse rates are even estimated as high as 80 to 90% within one year after delivery (McBride et al., 1999). The greatest percentage of postpartum relapse (more than 50% to 60%) occurs within the first three to six months after delivery (McBride et al., 1999; Severson, Andrews, Lichtenstein, Wall, & Zoref, 1995).

According to the Substance Abuse and Mental Health Services Administration (SAMHSA) survey results (National Household Survey On Drug Abuse Population Estimates 1998), females of childbearing age between the ages of 18 and 25 have a 64.5% rate of ever using cigarettes, a 43.9% rate of using cigarettes during the previous year, and a 37.8% rate of use during the past month (SAMHSA, 1999). This age group ranks higher than any other age group for use during the past year as well as recent use. Ethnic variations for cigarette smoking during the previous year for females ages 18 to 25 were as follows: White (non-Hispanic) 52.7%, Hispanic 37.7%, and Black, non-Hispanic: 34.3%. Rates for this age group are even higher than the national averages for the southern region of the country: 68.8% ever using cigarettes, 46.3% using cigarettes during the past year, and 42.1% during the past month.

If cigarette smoking is so damaging to mother, fetus, child, and other children, why do so many pregnant women quit smoking during pregnancy and then resume the

behavior within the first three to six months postpartum? What is it about the postpartum period that triggers relapse? Studies of postpartum smoking relapse have identified demographic factors and risk factors that are correlated with smoking relapse. Addiction is a significant influence and one only recently acknowledged by tobacco corporations. On October 13, 1999, Phillip Morris openly acknowledged that smoking cigarettes is addictive (Florida Times Union, October 14, 1999), which contributes to changing perceptions about smoking and negates the tobacco companies' previous stance that smoking is merely a choice for most smokers. How media messages (pro and con) influence smoking cessation or relapse is as yet undetermined.

Smoking may be experienced as a stigmatizing behavior by pregnant women as deception rates concealing smoking during pregnancy (as confirmed by comparing results of biochemical tests with self-reports) are high, sometimes reaching as high as 20% to 50% in some populations (Windsor, Li, Boyd, & Hartmann, 1999; Walsh, Redman, & Adamson, 1996). The recognition of smoking as a potentially stigmatizing, deviant behavior influences decisions of pregnant and postpartum woman. Goffman (1963) stated that the term "stigma" is used to refer to an attribute that is deeply discrediting. However, he clarified that it is not the attribute that is stigmatizing but how it is viewed in relationships. Goffman categorized stigma into three types: abominations of the body, blemishes of individual character, and tribal stigma of race, nation, and religion. If smoking were labeled as stigmatizing, it would come under the "blemishes of individual character" category because smoking would be considered a result of weak will emanating from addiction.

If smoking is viewed as deviant and therefore discrediting to the individual, the individual may go to great lengths to conceal the information about the behavior and thus attempt to pass as a non-smoker to prevent becoming discredited. Such a smoker is often referred to as a "closet smoker." Information control by the potentially discreditable person becomes very important in maintaining social acceptance. Information control is also critical from the perspective of health care providers because identifying smokers, advising them to quit, and referring them for treatment will not occur without disclosure of the behavior.

Is smoking more or less stigmatizing after delivery compared to smoking during pregnancy? How does self-perception as a new mother affect smoking decisions? At the present time it is unclear how the role of new mother contributes to relapse. We also need to be clear about how the social interactions of the new mother may influence her. Other influences may include mood disorders and stress. Questions remaining about postpartum relapse include whether pregnant quitters actually planned to quit smoking permanently or whether they planned to temporarily suspend the behavior. Because younger adult women typically have not smoked long enough to experience significant diseases caused by tobacco and the perceived beneficial effects of smoking reinforce continuation of the addiction, it is probable that these reasons contribute to smoking relapse.

Though there have been studies assessing smoking cessation and relapse for pregnant and postpartum women, studies generally compare socio-demographic factors or treatment methods and are not theory building studies specifically interpreting the unique experiences of the mother through pregnancy and the

postpartum period. A study focusing on the influences that maintain smoking cessation or contribute to relapse of the young pregnant and postpartum woman is needed. If the younger adult age group could be targeted for help with smoking cessation (and the rate of long term abstinence increased), the benefits would positively impact the baby, future children, and the health of the mother at a time in her life when irreversible effects of smoking are usually in the very early stages.

Nurses are health care providers who are in a unique role to identify and interact with pregnant women who smoke. Assisting pregnant women to change the one behavior that so profoundly affects the lives of so many individuals in the immediate future and for the long term is a worthwhile goal. Understanding the meaning of smoking from the perspective of the smoker during a critical developmental stage (pregnancy and the postpartum period) may facilitate the development of stage specific interventions that are sensitive to the experiences of the women.

Purpose of the Study

The purpose of this study is to develop a substantive grounded theory about pregnancy and postpartum smoking cessation, maintenance and/or relapse. The aim was to understand how women make decisions about quitting smoking and actually stop smoking during pregnancy, a defined developmental stage of life, and then either remain abstinent or resume smoking in the postpartum period. Theory development will set the stage for specific interventions aimed toward more effective sustained abstinence strategies.

Theoretical Framework for Grounded Theory Research

The grounded theory method will provide the basis for developing a substantive theory from the individual experiences of the postpartum participants and will be useful in understanding and illuminating the social-psychological influences that maintain smoking cessation or contribute to relapse. A grounded theory approach to postpartum smoking relapse and cessation will also be useful in understanding cultural influences at a time in history when multiple influences target smokers to quit. Grounded theory offers a systematic, rigorous method to study the diversity of human experience and generate relevant, plausible theory that can be used to understand the contextual reality of behavior (Glaser & Strauss, 1967). A quality grounded theory meets the two major criteria of good scientific inductive theory: parsimony and scope (Glaser, 1992). The model that will be generated will provide a foundation for interventions aimed to help pregnant women maintain smoking cessation.

Symbolic interactionism provides the theoretical framework for the grounded theory method of research (Blumer, 1969). The social psychological theory of symbolic interactionism grew out of the Chicago school of sociology and searches to portray and understand the process of meaning making. George Herbert Mead provided the foundation of symbolic interactionism and Herbert Blumer's works elaborated on Mead's (Blumer, 1969).

There are four central concepts in symbolic interactionism (Blumer, 1969). First, people, both individually and collectively, act on the basis of the meanings that objects have for them in their world. Second, people interact through a process of making and interpreting indications to one another. Third, social acts, whether

individual or collective, are constructed through an individual process of noting, interpreting and assessing situations that are to be confronted. Finally, the process of organized interactions is complex and dynamic.

Symbolic interactionism, a theory of human group life and conduct, has three basic elements: objects, self, and social interaction. The term "objects" actually constitutes the world in which we live. For Mead, an object is anything that can be designated or referred to (Blumer, 1969). The meaning of the object is not inherent in the object but comes from the meaning the individual imputes towards it. Thus, a cigarette may be simply a prop in the movies or a source of environmental pollution to a non-smoker but may represent a break from work or a stress reliever for a smoker.

Mead believed the human being has a self and that the human being is an object to his own action (Blumer, 1969). He believed a human can perceive himself, have conceptions of himself, communicate with himself, and act toward himself. He viewed this self-interaction as making indications to himself and meeting these indications by making further indications toward the self in a planning and evaluative manner. The smoker has a relationship with the cigarette and makes indications to herself throughout the process of smoking and the significance it holds to her. This ongoing internal dialogue impacts decisions about smoking and the role that cigarettes play throughout the day for the smoker.

Social interaction is viewed as originating from individuals rather than imposed by the structure of the society in which they live. Mead views human society as a dynamic expression of the interaction of human organisms (Blumer, 1969). He views group life as a process of joint actions. Interactions are ongoing mediated

interpretations between people. Smoking is an individual behavior modified by self-indications as well as a social interactive behavior influenced by others responses to the behavior.

The social acceptance and legitimacy of smoking during pregnancy and during the postpartum period are highly influenced by the smoker's perception of others' beliefs about that behavior. If smoking is perceived as "deviant," this belief may promote abstinence in the context of when it is defined as deviant. However, if the individual continues smoking and views it as deviant, she may conceal her smoking and not disclose the smoking behavior to others. Deviance as a sociological category does not reside in the form of the behavior per se, but rather how the behavior is viewed by members of society and the way society treats those who engage in the behavior (Hewitt, 1994).

Deviant behavior is defined by the perception of threat and the attribution of responsibility to the deviant. Deviance is discussed in moral terms of right and wrong. "The mark of deviance is that a breach of social order is perceived and attributed to the act of a specific individual" (Hewitt, 1994, p. 244). Deviance is considered a violation of norms and the violator's behavior is viewed as willful and knowledgeable unless shown to be otherwise. Symbolic interactionism reflects that meanings may be shared by individuals or groups or may vary between members of society or may vary for the individual following a process of self-interaction. Smoking has had a variety of meanings throughout history. Smoking is a personal activity and an activity that also occurs in social interaction with others. Individuals' perceptions of the object cigarette and the self-perception of the experience of smoking have different personal

meanings in various contexts. Societal messages also strongly influence the meaning and the behavior of smoking. Smoking when pregnant may or may not be viewed by smokers and non-smokers alike as deviant. How postpartum smoking is viewed is important in this research.

Symbolic interactionism as the underlying theoretical framework for this dissertation provides an ideal structure to understand smoking from the perspective of the postpartum participant. The focus is on women's meaning of re-engaging in smoking after giving birth or maintaining cessation; the meaning will be related to the context of the world in which the women interact. Smoking cessation interventions will be effective only if they are considered within the larger context of women's lives.

Significance for Nursing

Because smoking is the single greatest cause of premature death and preventable disease and disability in the United States, effective intervention must be a priority for health care providers. Pregnant smokers endanger themselves, their fetuses, and others in their environment. Health promotion for young women who are new mothers must emphasize continued smoking cessation and prevention of smoking relapse.

In order to plan effective treatment programs, it is important to understand the meaning of smoking through the shared stories of the participants. Qualitative research addresses the contextual reality of smoking in the world of the young new mother. Grounded theory offers a systematic, rigorous method to generate relevant,

plausible theory to understand this behavior in order to develop meaningful treatment strategies.

CHAPTER 2
REVIEW OF LITERATURE

Pregnancy is recognized as an important time for smoking women to quit because of the risks to the fetus. Cigarette smoking during pregnancy is the single largest modifiable risk for pregnancy-related morbidity and mortality in the United States (Dempsey & Benowitz, 2001). Maternal mortality rates are also increased in smokers (Mitchell, Sobel, & Alexander, 1999). In 1997, 13.2 % of women in the United States reported smoking during pregnancy (Wang et al., 2002) though estimates of women smoking during pregnancy range from 12 to 22 percent (Surgeon General, 2001). Between 20 to 40 percent of pregnant smokers quit at some point during their pregnancy (Ko & Schulken, 1998) and though pregnant women have abstinent periods of five to nine months, estimates of postpartum relapse range from 40 to 90 percent. According to the Surgeon General's Report, "Women and Smoking - 2001," only about one-third of women who stop smoking during pregnancy are still abstinent one year after delivery but a higher percentage of women stop smoking during pregnancy than at other times in their lives.

Retrospective and prospective research studies of pregnant smokers and postpartum mothers have identified factors associated with continued abstinence and relapse. However, relapse rates are still significant and effective long-term treatment is still being explored. The literature review focuses on areas relevant to postpartum smoking, specifically: tobacco as an addictive substance; the effects of tobacco on the

fetus and offspring; theoretical models pertaining to smoking and addiction; postpartum cessation and relapse studies; gender differences and smoking cessation; smoking and depression; and qualitative research on smoking and addiction.

Smoking and Addiction

Because of nicotine's psychopharmacological effects on the brain, addiction to nicotine maintains the use of tobacco products. The effect nicotine has on the brain may begin before birth if tobacco is used during pregnancy. Understanding the effects of nicotine in women is important in understanding women's experiences with smoking, cessation, and relapse.

Nicotine dependence is diagnostically described in the Diagnostic and Statistical Manual of Mental Disorders (DSM IV) as follows:

> Tolerance to nicotine is manifested by absence of nausea, dizziness, and other characteristic symptoms despite using substantial amounts of nicotine or a diminished effect observed with continued use of the same amount of nicotine-containing products. Cessation of nicotine use produces a well-defined withdrawal syndrome that is described below. Many individuals who use nicotine take nicotine to relieve or to avoid withdrawal symptoms when they wake up in the morning or after being in a situation where use is restricted. . . Individuals who smoke and other individuals who use nicotine are likely to find that they use up their supply of cigarettes or other nicotine-containing products faster than originally intended. Although over 80% of individuals who smoke express a desire to stop smoking and 35% try to stop each year, less than 5% are successful in unaided attempts to quit. Spending a great deal of time in using the substance is best exemplified by chain-smoking. Because nicotine sources are readily and legally available, spending a great deal of time attempting to procure nicotine would be rare. Giving up important social, occupational, or recreational activities can occur when an individual forgoes an activity because it occurs in smoking-restricted areas. Continued use despite knowledge of medical problems related to smoking is a particularly important health problem. (American Psychiatric Association, 1994, p. 243)

Nicotine is the addictive compound of tobacco (Le Houezec, 1998). Nicotine has a number of reinforcing actions in smokers which include reduced anxiety and

irritability, enhanced attention, and diminished appetite and weight (Piasecki & Newhouse, 2000). The strength of the addiction is out of proportion to the subtle rewarding and psychological effects. The repetition of the smoking act thousands of times per year by moderate to heavy smokers leads to a strong conditioned association between the sensory aspects of smoking (a conditioned stimulus) and the pharmacological effects of nicotine (the unconditioned stimulus). Nicotine dependence causes changes in brain functioning gradually over time in response to prolonged periods of exposure to nicotine (Gold & Herkov, 1998). Changes in the brain are both acute and prolonged and in some tobacco users may be permanent. Abstinence from nicotine may allow certain addicts to recognize that they cannot function at their pre-morbid level.

Smokers learn that regular smoking prevents abstinence symptoms from developing (Parrott, 1999). Nicotine users feel normal on the drug and must maintain their nicotine intake in every type of situation. The regular smoker needs nicotine to maintain normal moods and suffers from unpleasant feelings of irritability and tension between cigarettes when the plasma nicotine levels are falling. The link between regular intake of nicotine and keeping moods within normal bounds becomes strongly conditioned over time.

Nicotine withdrawal can begin within a few hours of cessation, typically peak in one to four days and last several weeks (Gold & Herkov, 1998). Withdrawal symptoms include a desire for sweets and weight gain, impaired performance on tasks requiring vigilance, mood changes, and cravings for the tobacco product. The effects of withdrawal from chronic nicotine exposure on the dopamine system cause a

rebound in dopamine activity suggesting a dysregulation of these important motivational and mood systems.

Tobacco Effects on Offspring

Addressing use of tobacco for childbearing women is a public health emergency because of the effects of cigarette smoke on the fetus and newborn. Tobacco smoke has been causally linked with stillbirths, premature births, decreased fetal growth, low birth weight, placenta previa, abruptio placenta, spontaneous abortion, ectopic pregnancy, fetal lung function, cleft palates and lips, childhood cancers, sudden infant death syndrome (SIDS), decreased natural fertility and impaired success of in vitro fertilization (Scheibmer & O'Connell, 1997; U.S. Department of Health & Human Services, 2000). Smoking during pregnancy also has serious intergenerational consequences. Harmful effects to children include neurological abnormalities, developmental delays, and attention deficit hyperactivity disorder. New research also suggests that smoking during pregnancy may play an etiologic role in the development of psychiatric disorders in children. Maternal smoking after childbirth is associated with a number of risk factors for the newborn and children. The dangers for the newborn result from exposure to environmental tobacco smoke (ETS) from any source, exposure to transmammary secretion of smoke compounds in breastmilk, and maternal alteration in caregiving behaviors, such as breastfeeding, related to smoking (American Academy of Pediatrics, 2001; Morkjaroenpong et al., 2002).

Maternal mortality rates are higher in smokers than nonsmokers (Mitchell, Sobel, & Alexander, 1999). Ectopic pregnancy is the leading cause of death during

the first trimester. Smoking may reduce tubal motility, thus delaying ovum entry into the uterus. There is also an increased risk of pelvic inflammatory disease. Abruptio placenta rates are higher in smokers. Smoking causes vasoconstriction which may allow the placenta to separate from the uterine wall. Smokers are also more likely to abort chromosomally normal embryos than non-smokers and though it is not fully understood the underlying mechanisms for these adverse effects, it is known that smoking negatively affects maternal nutritional status, impairing protein metabolism, reducing levels of amino acids, ascorbic acid, and vitamin B12 and increasing susceptibility to infections.

Pregnant smokers typically have infants weighing, on average, 200 grams less than babies born to matched, nonsmoking women (Windsor, Oncken, Henningfield, Hartmann, & Edwards, 2000). Low birth weight babies, defined as babies weighing less than 2500 grams, are twice as likely to be born if their mothers were smokers. A dose-response relationship has been established between smoking and low birth weight that is independent of the mother's socioeconomic status, race, parity, maternal size, gender of the child, and gestational age at birth (Messecar, 2001). Low birth weight babies are 40 times more likely to die in their first four weeks of life than normal weight babies. Low birth weight is an indicator of inadequate fetal growth related to either poor weight gain during gestation or preterm delivery: two thirds of deaths in the neonatal period occur among low birth weight babies.

In order to differentiate harm to the fetus related to potential teratogens in cigarette smoke from nicotine, continuous subcutaneous infusion models of nicotine were developed that eliminated the hypoxic/ischemic components of nicotine exposure

(Levitt, 1998). The effects of prenatal nicotine exposure result in a pattern of altered development. There is a complex combination of delays in developmental maturation, followed by recovery and then late-expressed alterations. Nicotine may be directly toxic to the developing brain. Maternal smoking causes statistically significant, though modest changes in general brain size, protein/DNA and RNA/DNA content, and ornithine decarboxylase activity on the fetal nervous system (Levitt, 1998).

Researchers have shown that nicotine freely crosses the placenta and believe that the human fetus is actually exposed to a higher nicotine concentration than the smoking mother (Milberger, Biederman, Faraone, Chen, & Jones, 1996). Nicotine exposure appeared to generate inconsistent changes in biochemical markers (Levitt, 1998). The rapid and often paradoxical changes in particular markers strongly suggest viewing specific nicotine effects with great caution because ontogenetic events, such as cell fate decisions, cell migration, neuronal polarity, or synapse formation have not been measured directly.

Nicotine shrinks the placenta's blood vessels and hampers oxygenation and feeding of the fetus (Frydman, 1996). The development of the fetus depends upon the quantity of oxygen provided by the mother and this is affected by both nicotine and carbon monoxide that crosses the placenta. Although the main accepted mechanism of smoking-related reproductive outcomes has been attributed to nicotine's cardiovascular effects causing uteroplacental insufficiency reducing blood flow through the placenta, Dempsey and Benowitz (2001) suggest that a myriad of cellular and molecular biological abnormalities produced by a number of tobacco smoke

toxins, acting alone or in concert, produce a wide range of adverse pregnancy outcomes.

Maternal smoking during pregnancy has serious intergenerational consequences with associated costs exceeding several billion dollars annually (Wakschlag et al., 2000). Intrauterine cigarette smoke exposure may increase the risk of conduct disorder in boys, a severe childhood-onset disorder characterized by pervasive antisocial behavior. A strong and significant positive association between maternal smoking and attention deficit hyperactivity disorder (ADHD) in children was found in a study (Milberger et al., 1996). The results could not be attributed to socioeconomic status, parental ADHD, or parental IQ. On the basis of animal studies, it has been hypothesized that catecholaminergic pathways play an important role in the etiology of ADHD. Though the exact mechanism of stimulant therapy is unknown, evidence shows that the dopaminergic system is involved.

Postnatal smoking is linked to higher rates of sudden infant death syndrome (Dybing & Sanner, 1999). The health of all children may be put at higher risk when they are exposed to ETS from family members that smoke indoors. Environmental tobacco smoke exposure is a risk factor for the development of asthma and asthma exacerbations, increased frequency of respiratory symptoms and illness in children, and decrease in lung function (Morkjaroenpong et al., 2002). Other studies showed environmental tobacco smoke increases the risk of lower respiratory tract infections, otitis media, and pulmonary hypertension of the newborn (Mitchell, Sobel, & Alexander, 1999).

Newborn infants who are breastfed by mothers who smoke experience higher incident of bronchitis, pneumonia and otitis media in their first year of life compared to breastfed infants of nonsmoking mothers (Scheibmer & O'Connell, 1997). After breastfeeding, infants of smoking mothers had significant changes in respirations and oxygen saturation compared to infants of nonsmoking mothers who only experienced significant changes in pulse (Stepans & Wilkerson, 1993). Maternal smoking has also been associated with possible shorter lactation resulting in reduced daily milk output of about 250 to 300 ml (Horta, Victora, Memezes, & Barros, 1997). The underlying cause of this is believed to be the increase of dopamine secretion in the hypothalamus leading to reduced prolactin levels. However the shorter duration of breastfeeding did not seem to have strong physiological evidence as revealed in extensive database studies (Amir & Donath, 2002; Amir, 2001). Psychosocial factors were primarily responsible for the lower intention to breastfeed, lower initiation of breastfeeding, and shorter duration for smoking women than those who did not smoke after an extensive, epidemiologically focused review of the literature. The reduced milk production and decreased weight gain in infants of smoking mothers placed nicotine in the category of "Drugs of Abuse Contraindicated during Breastfeeding" (American Academy of Pediatrics Committee on Drugs, 2001). However, the Committee on Drugs of the American Academy of Pediatrics believes infants may be more at risk if mothers smoke and bottle feed than if mothers smoke and breastfeed. They believe the benefits of breast milk for the developing infant may outweigh the harm of smoke compounds present.

Transtheoretical Model

The grounded theory method used in this study assists with the discovery of concepts and hypotheses, not with testing or replicating theoretical models found in the literature (Glaser, 1967). However, it is relevant to consider pertinent theories of smoking and addiction when developing a grounded theory in order to enhance conceptual understanding of the fields of tobacco addiction and wellness promotion. A key theoretical model in the field of addiction that offers an integrative perspective on the structure of intentional change is the Transtheoretical Model developed by Prochaska and DiClemente (Prochaska, Norcross, & DiClemente, 1994). The model provides a framework for understanding behavior change as a function of coping activity and has four key constructs: stages of change, processes of change, decisional balance, and self-efficacy. The model is described as transtheoretical because it incorporates cognitive, motivational, social learning, and relapse prevention theories (Morera et al., 1996). Though this model has been used in such diverse behaviors as weight control, alcohol consumption and condom use, it has been the most thoroughly evaluated in the smoking cessation literature. The Transtheoretical Model, used extensively in studies of smoking addiction, is like an umbrella that covers a number of theories that pertain to smoking addiction and includes the concepts of self-efficacy and planned behavior.

Stages of change

The stages of change model assumes that behavior change is a dynamic process involving five distinct stages that are temporal and involve a series of tasks that must be completed before moving to the next stage, though completion of one

stage does not inevitably lead to the next (Prochaska, Norcross, & DiClemente, 1994). Though the stages of change model is part of the comprehensive transtheoretical model, it has become the basis for many studies of smoking addiction.

The first stage, precontemplation, is the stage where the person is not considering changing the targeted behavior and may actually be resistant to change (Miller & Rollnick, 2002). A person in precontemplation may be more interested in changing the people around them than the identified behavior. In contemplation the person is characterized by consideration of active change and is considering the risks and rewards of making the change. In this stage the person is still engaging in the targeted behavior but is planning to change. In the preparation stage plans are being made for changing the behavior in the near future. In the action stage individuals are actively modifying the behavior and environment. The action stage requires the greatest commitment of time and energy. Maintenance is the final stage in which the change has occurred for at least six months to a lifetime. Individuals in the maintenance stage remain highly susceptible to relapse, which is part of the model. Maintenance requires prolonged abstinence and continuing process activity.

Processes of change

The processes of change involve broad strategies that employ a variety of techniques. The designated processes are some of the most common and powerful approaches used by professionals and self-changers and originate from diverse systems of psychotherapy (Prochaska et al., 1992). There are two main categories of processes of change: experiential and behavioral. Experiential processes involve changes in the way people think and feel about their smoking, their basic personal

reasons for smoking and quitting. Behavioral processes involve people actually changing aspects of their smoking behavior. In general the processes used in the early stages of change are experiential while those used in later stages are behavioral. Experiential processes include: consciousness-raising, dramatic relief, social liberation, self re-evaluation, and environmental re-evaluation. Behavioral processes include: commitment, counter-conditioning, stimulus control, reinforcement management, and helping relationships.

Decisional balance

Decisional balance is defined as the relative importance a person gives to the advantages and disadvantages of the target behavior, such as quitting smoking (Ruggiero, Tsoh, Everett, Fava, & Guise, 2000). This refers to a smoker's motivation for change and the strength of the commitment. The decisional balance varies across the stages of change. In the earlier stages the disadvantages of changing the target behavior are stronger. During contemplation the advantages become stronger but ambivalence is still strong and a normal part of the process of change. By the preparation stage the advantages of quitting smoking outweigh the disadvantages and movement is made towards a plan of action.

Self-efficacy and planned behavior

Self-efficacy is one's perceived ability to perform a specific task (Prochaska et al., 1992). For smoking this means self-confidence to quit increases one's ability to quit. A person with low self-efficacy for quitting would be less likely to make a quit attempt than one with high self-efficacy. Self-efficacy increases through the stages of change model. However in the precontemplation stage it is difficult to differentiate

between unwillingness to change and a true low level of self-efficacy. Self-efficacy comes from Bandura's Social-Cognitive Theory (1986), which involves a broad conceptual domain that incorporates many theoretical ideas and, in particular, self-efficacy. Research over the last decades has stressed the importance of self-efficacy expectations for taking action in general. The concept of self-efficacy has also been added to the model of reasoned action by several researchers.

Ajzen refers to the concept as perceived behavioral control (DeVries & Backbier, 1994). This renewed model is referred to as the model on planned behavior or the ASE model (Attitude-Social influence-Efficacy model). Ajzen's Theory of Planned Behavior is designed to predict behavior and enhance understanding of its psychological determinants (Hanson, 1997). According to this theory the intention to perform or to not perform a behavior is the immediate determinant of the behavior. The intention is a direct function of three independent variables: attitude, subject norm, and perceived behavioral control. Attitude is a function of one's salient beliefs about the consequences of the behavior multiplied by evaluation of these consequences. The subjective norm is a function of the product of one's perception of the approval or disapproval by significant others of the behavior multiplied by motivation to comply with the significant others. Put into the context of smoking, the woman's intention to smoke cigarettes would be a function of her attitude toward smoking, perception of what significant others would think about her smoking, and perception about self-control over smoking behavior.

Transtheoretical model and research

The transtheoretical model is a comprehensive, eclectic model that is rarely used in its totality in research. This model may have transformed thinking about smoking cessation from an event to a process. The stages of change model has been frequently used to label readiness for change or suggest intervention techniques which then may incorporate the processes of change. Self-efficacy is often mentioned in addiction research as a factor in cessation along with a shopping list of other demographic variables and environmental influences.

A cross-sectional survey was conducted in a study focusing on maternal factors, obstetric history, and smoking stage of change (Haslam, 1999). Over a two week period all women who attended antenatal clinics at the Leicester Royal Infirmary NHS Trust completed 254 questionnaires. The variables assessed included intention to breastfeed, intention to attend antenatal classes, and have a planned pregnancy. The previous obstetric history and child health problems were also addressed. The stages of change were modified into three stages: precontemplative, contemplative-preparation, and action-maintenance. Nearly 25 % of the sample were current smokers and almost 25 % were ex-smokers. The other half of the sample were never smokers who were not placed into one of the three categories.

The results of the analysis revealed that intention to breastfeed was more common among non-smokers (Haslam, 1999). Fifty six percent were never-smokers who intended to breastfeed. When the smokers were assessed for intention to breastfeed, 16% were in the precontemplative stage, 23% were in the contemplative-action stage, and 61% were in the action-maintenance stage. Having a planned

pregnancy was more common among non-smokers as determined by the smoking status and stage of change: 58% were never smokers, 25% were ex-smokers and 17% were smokers. There were no significant differences to attend antenatal classes with smoking status but the majority was in the action-maintenance stage of change. Previous obstetric complications were not associated with either smoking status or stage of change. Respiratory infections in at least one child were more likely for smokers. Precontemplators were more likely to have at least one child with asthma or respiratory infections.

The results reflect smokers have higher levels of potential smoking health effects in their children but the results did not suggest higher rates of obstetric complications which might be expected for smokers. Higher rates of anticipated breastfeeding for non-smokers and action-maintenance stage reflected influence of smoking on choices for breastfeeding. Other studies often show weaning early to resume smoking. This study's results were confusing as comparisons sometimes focused on non-smokers versus smokers or results addressed the modified stages of change or a combination of both. The number of variables to include ages of the participants confounded what was actually learned from the results and it seemed the stages of change model was forced onto the data and artificially collapsed into three categories to work with the limited data in a statistically meaningful way.

A prospective study beginning with women entering prenatal care assessed predictors of smoking cessation from a sample of pregnant Medicaid recipients (Woodby et al., 1999). The results showed that baseline cotinine value, duration of smoking habit, self-efficacy, exposure to environmental tobacco smoke, and exposure

to patient education methods were predictive of non-smoking status assessed during the third trimester of pregnancy. In this study a smoker was defined as a patient who reported taking at least one puff from a cigarette during the preceding seven days and/or had a baseline cotinine level of 31ng/ml during the first prenatal visit.

Variables that reflected nicotine dependency, such as baseline cotinine value and number of years smoking, were highly correlated with the ability to quit smoking during pregnancy (Woodby et al., 1999). Self-efficacy was a significant variable predictive of smoking status. The perceived ability to quit for 24 hours was predictive but the perceived ability to quit during the remainder of the pregnancy was not. Another predictor was whether the woman lived with a smoker. The baseline stage of change did not predict smoking cessation late in pregnancy among these participants. It was also believed that baseline stage of change shared common variance especially with nicotine dependence and self-efficacy. This study incorporated parts of the transtheoretical model such as stage of change and self-efficacy. Self-efficacy and social influences were the most important variables predictive of smoking cessation.

Postpartum Smoking Cessation and Relapse Studies

Postpartum smoking cessation and relapse studies are primarily quantitative, descriptive, and atheoretical. These studies identified a limited number of factors related to postpartum smoking cessation and relapse. Replication of factors of both cessation and relapse adds validity to the studies. A need for more theory generation exists in order to impact the morbid combination of smoking and childbirth.

A study involving women who had stopped smoking during pregnancy explored the association between early weaning and smoking relapse among

postpartum women (Ratner, Johnson, & Bottorff, 1999). Women who had participated in a smoking relapse prevention trial and breastfed were the focus for a secondary data analysis that targeted women who relapsed to smoking compared to those who remained abstinent or smoked occasionally. The dependent variable was breastfeeding for less than 26 weeks, which was considered early weaning. Co-variates in the study included intended duration of breastfeeding, parity, partner's smoking, nicotine dependence, emotional health, return to paid employment, and sociodemographic variables.

The results of the study revealed that 61% of the women who relapsed to smoking weaned their babies early (Ratner, Johnson, & Bottorff, 1999). The data also revealed that women who relapsed were almost four times more likely to wean early, controlling for intended duration of breastfeeding, education, and return to paid employment. Fifty percent of the women in this study were randomly assigned to an intervention which included face-to-face counseling in the hospital after delivery and eight telephone contacts during the first three months following delivery. They were also given a brochure that stated nicotine could be present in breastmilk up to five hours after smoking a cigarette and that nicotine in breastmilk could lead to infant irritability and sleeping problems. Other teaching points given to these women included risks of exposure to environmental tobacco smoke and other health-related reasons for remaining smoke-free. Data was collected at two times, baseline data following delivery and again at six months postpartum. Smoking status was assessed at both times by self-reports and measures of expired carbon monoxide.

Although exposure to the intervention was controlled for in the data analysis, a potential influence for early weaning not described might be beliefs about health benefits to the baby of smoking cessation and weaning versus smoking and breastfeeding (Ratner, Johnson, & Bottorff, 1999). The study indicates women reportedly stopped smoking to benefit the baby. If these women could withhold smoking during pregnancy to benefit the baby and they believed the baby would not be harmed if they smoked away from the baby, it would seem logical that these women would resume smoking unless they had a more pressing reason not to smoke. The intervention as described extolled the harm of smoking while breastfeeding but it was not clear if it promoted breastfeeding as the best choice over bottle feeding, even if the mother relapsed to smoking.

Socioeconomic impact on smoking before, during, and after pregnancy was the focus for a prospective study by Najman et al. (1998) in Brisbane, Australia. Data collection was conducted from 1981 to 1984 and included a sample of 8556 consecutive patients attending their first clinic visit at a large public hospital obstetric facility. The women were re-interviewed three to five days after births of their children and at six months and five years postpartum. Smoking relapse rates appeared to be associated with three major factors: living with a smoker in the immediate environment, being a previously heavy smoker, and reporting stressful experiences in the postpartum period. Relapse was also correlated with depression and boredom. In addition, advertising and the manipulation of women's idealized physical images contributed to relapse.

Results of this study may be confounded by self-reported smoking rates only without biological markers. Smoking during pregnancy has been noted to be under-reported (Windsor, Li, Boyd, & Hartmann, 1999). Attrition rates during the five years of the study were high, especially for mothers under 19 years of age (52%), women without a partner (>50%), pensioners (64%) and the lowest levels of annual family income on the first clinic visit (up to $5,199). Because the sample was extracted from a public hospital obstetric facility, the income tended to be low to middle income. Six percent of the sample was in the lowest of three levels with a mean of $4,144 per year over five years. Eighty three percent of the sample was placed in the mid-range with a five-year mean of $11,866 and finally the highest income group had 11% of the sample with a five-year mean of $21,639. One strength of this study was that it was prospective and conducted over a significant length of time, five years.

Surveys during newborns first well-care office visits to a pediatrician at 49 pediatric practices explored predictors of smoking during and after pregnancy (Severson, Andrews, Lichtenstein, Wall, & Zoref, 1995). Two thousand ninety one mothers were identified who had smoked in the month prior to pregnancy. The surveys revealed that 35% of the mothers reportedly quit smoking during pregnancy and 52% cut down for pregnancy. In this study, factors related to quitting smoking for pregnancy included younger age, higher level of education, lower smoking level, having a partner who did not smoke, not consuming alcohol, and allowing less smoking in the home. Relapse rates were highly correlated with their partners' smoking. Concerns with this study include lack of biological markers to validate smoking status. The participants completed a written survey during their first

pediatric well-care visit which was constructed to minimize the stigma of disclosure of smoking during pregnancy and the postpartum period but it was also fairly vague about smoking behavior.

Gender Differences and Smoking Cessation

Gender differences in smoking cessation rates exist. According to the National Household Survey on Drug Abuse Population Estimates 1998 (SAMHSA, 1999), 29.7% of men and 25.7% of women had smoked during the previous month. Population-based data (Centers for Disease Control and Prevention, 1994) indicate that the quit ratio (former smokers to ever smokers) is consistently higher for men (52%) than for women (47%). Smoking prevalence curves within comparable birth cohorts show women quit less frequently than men (Escobedo & Peddicord, 1996). Gender differences exist for smoking cessation related to social pressure and social support. Women are thought to be more susceptible to social pressures to smoke and are more likely to relapse in social situations or when their spouse/partner smokes (Royce, Corbett, Sorensen, & Ockene, 1997). Other studies also indicated that women who relapsed were more likely to live with a smoker (Ko & Schulken, 1998).

A study by Perkins et al. (as cited in Zevin & Benowitz, 2000) using nicotine nasal spray showed that women are less sensitive to the effects of nicotine than men. Response differences included a lesser rate of self-administration, a lesser degree of regulation of nicotine intake and less accurate drug discrimination. It has also been noted that women gain more weight after smoking cessation than men as noted in a study by Williamson et al. (as cited in Zevin & Benowitz, 2000). It is uncertain how

much the difference is due to gender differences in sensitivity to the metabolic or appetite-suppressant effects of nicotine or to behavioral factors.

Gender differences have been explored from many different perspectives. One of the most common hypotheses is that negative affect, stress, and depression are determinant of outcomes among women (Borrelli, Bock, King, Pinto, & Marcus, 1996). Depression, negative affect, and stress may moderate the relation of gender with abstinence by possibly exerting a more pronounced effect among women than men. Studies have shown that depression is associated with smoking relapse; women have twice the incidence of major depression as men (Piasecki & Newhouse, 2000). Another gender difference that has been observed is that withdrawal severity may be greater among women than men (Hatsukami, Skoog, Allen, & Bliss, 1995). Interestingly women often show lower levels of dependence to nicotine on both self-report and biochemical measures than men (Perkins, 1996). Perkins argues that nicotine replacement therapies are less effective for women than men because the reinforcement that women derive from smoking is believed to be less dependent on nicotine, per se. Other researchers suggest that demographic variables might explain gender differences. Women may have poorer outcomes because they have less education and this is tied to relapse (Bjornson et al., 1995).

A study examining the generalizability of gender differences in abstinence across study sites, treatments, and time of relapse (Wetter et al., 1999) affirmed consistent gender differences. In this study involving 632 subjects, three trials using randomized, double-blind, placebo-controlled nicotine patch therapy, and four locations, men were significantly more likely than women to be abstinent at each time

point (week one, end of treatment, and six months). Gender differences in predictor variables were also found: men smoked more cigarettes per day, had smoked for a longer period of time, and had higher CO and serum nicotine levels; women reported higher levels of pre- and post-cessation stress, negative reinforcement, appetite/weight control, and negative consequences expectancies as well as cognitive self-control and solace-seeking coping styles. Although men and women differed on a host of predictor variables, none of them could account for the difference in gender outcome.

Socially tobacco use has been identified as a way to organize relationships for women (Wilson, 2000). "Smoking is used by women as a way to bond with people, equalize power between them, or distance people from them—particularly small children. Smoking has often been described as the only break that women had from their children" (p. 3). Women often believe that smoking enhances social relationship, for instance by diffusing certain situations. Cigarettes are used to suppress negative emotions, which may avoid conflictual situations. Other social reasons given for smoking by women include seeking conformity and desiring comfort. Women have described cigarettes as their best friend and their most dependable partner

Smoking and Depression

Smoking is more prevalent in depression and smoking cessation is less successful in depressed patients (Fowler, et al., 1996). Of nicotine-dependent smokers, 26.7% had a history of major depression; of nondependent smokers, 12% had a history of major depression; and of non-smokers 9.4% had a history of major depression (Le Houezec, 1998). Depression is a negative prognostic factor for smoking cessation.

Qualitative Research on Smoking and Addiction

Because smoking cannot be explained merely as a physiological addiction or behavioral habit, it is important to understand the context of the smoking experience from the perspective of the woman. Qualitative studies promote understanding of social, psychological and emotional influences that impact smoking behavior. Qualitative research can generate concepts and theories about postpartum smoking in order to enhance understanding about smoking behavior. Such understanding can be foundational to promote programs to promote long-term smoking cessation. Qualitative studies used either the grounded theory, phenomenological, or focus-group method and varied from descriptive to theoretical. Qualitative studies addressed issues related to pregnancy and smoking or addressed smoking not in the context of childbirth.

A qualitative study of pregnant and postpartum women's smoking experiences provide a descriptive level of findings using the theoretical framework of symbolic interactionism (Edwards & Sims-Jones, 1998). Interviews were modified by emerging themes using the constant comparison method of data analysis. The major themes identified from this study were: pregnancy as a context for stopping smoking, returning to smoking, and social influences on smoking behavior. This study also included participants who made a stop smoking attempt during pregnancy and may actually have continued smoking up to delivery and into the postpartum period. The authors provided rich description as they elaborated on their identified themes but the themes seemed superficial. It is difficult to describe the diversity of the participants because the researchers only state that they were low-risk primiparous women who

had delivered at five hospitals in the Regional Municipality of Ottawa-Carleton, Canada. This study is a useful beginning for further qualitative research that aims to generate theory about pregnancy and postpartum smoking cessation.

A phenomenological study of the lived experiences of pregnant women addressed the issue of smoking and pregnancy in one of the three categories that emerged from ten themes (Bondas & Eriksson, 2001). The forty Finnish women are interviewed for a total of 80 interviews. The three categories included "wishing for a perfect child," "an altered mode of being," and "striving to achieve family communion." Wanting a perfect baby was an expressed desire of pregnant women and was reflected in the three themes of "promoting the health of the unborn baby," "health as no longer taken for granted," and "changing health behavior." In this last theme women stated they thought they would harm their babies if they used tobacco, alcohol, or drugs and they experienced an internal urge and external pressure from the health care staff, friends and colleagues at work to stop, however, many were ashamed because they could not stop and tried to hide or cut down on their use. This study began to address women's awareness of the effects of addictive substances on the unborn child and sources of pressure to stop the use of these substances. However, the study implies that the pressure from outside sources, to include health care providers, might actually impair cessation because of the accompanying stigma that leads to concealing substance use when stopping is not achieved.

Another qualitative study addressed smoking and pregnancy within a hermeneutic-phenomenological analysis of the pregnant smoker's experience of ante-natal care in regards to information about smoking from their health care provider

(Haugland, Haug, & Wold, 1996). All participants were pregnant smokers; they held their health care providers responsible for addressing smoking during pregnancy. Participants also related their health personnel did not care about their smoking habits because the issue of smoking was minimally addressed and very little written information was provided; this placed their health care providers in the role of allies for their continuation of smoking. Participants who said they were not motivated to stop were more satisfied with the information they received. This study emphasized the importance of the interaction of health care providers and patients in changing behavior and underlying assumptions patients may make with minimal, or in the absence of, information or communication. Because this study was conducted in Norway, cultural differences may affect results.

A multi-site qualitative study using focus groups to tell the story about being an adolescent and a smoker was revealing from the perspective of parental influences on smoking (Clark et al., 2002). When adolescents talked about smoking initiation, parents were often cited as instrumental. Parents were viewed as enablers by modeling smoking; parents were also described as lenient and sympathetic with children who smoked. Tobacco was noted to be readily available from older friends and family members including siblings and parents. This study provided provocative information for parents to take into consideration as they address their own tobacco addiction.

A grounded theory study about mothering on crack cocaine (Kearney, Murphy, & Rosenbaum, 1994) provided insight about managing the incompatibility of mothering and drug use and may provide some insight about smoking and mothering.

The central process, "defensive compensation," was described as the mothers' attempt to maintain their mothering standards while using crack and provided a new way of thinking about mothering while simultaneously abusing drugs. Women making informed choices during pregnancy (Levy, 1998) was another grounded theory study. Smoking was considered as one of the choices women make during pregnancy along with many other decisions such as prenatal testing and weight management. The core variable identified was "maintaining equilibrium" and the three substantive categories were identified as regulating information, contextualising information, and actioning. This theory focused on communication control by the pregnant woman which influenced choices to include the decision about smoking cessation. This study generates a theory about the problem of making decisions during pregnancy; maintaining equilibrium, in the case of smoking and pregnancy, may be deleterious to both the mother and infant. This study enlightens the issue of interactive obstacles and barriers that impact smoking cessation.

Another example of a qualitative study using the grounded theory approach was a study of older adults' experiences who quit smoking (Brown, 1996). This study was from the perspective of the quitter and may provide sensitization to issues that the new mother must face as she makes decisions about maintaining cessation or relapsing. The core variable was redefining smoking and the self as a nonsmoker. The theoretical categories include recognizing the need to quit, making the decision, learning to be a nonsmoker, and sustaining as a smoker. Interestingly these categories correspond with the stages of change model of precontemplation, contemplation, preparation, action, and maintenance.

Summary

This focused literature review revealed the need for a theory generating study focusing on pregnancy and postpartum smoking cessation. Many descriptive, quantitative studies highlighted factors associated with postpartum smoking cessation and relapse, but these studies were primarily atheoretical. Studies that utilized the transtheoretical model generally incorporated parts of this eclectic model, especially the stages of change component that placed smoking choices into a temporal process. Qualitative studies were descriptive and/or theoretical and focused on smoking and addiction but did not specifically focus on pregnancy and postpartum smoking cessation and relapse. Some of these excellent studies (Kearney et al., 1994; Edwards & Sims-Jones, 1998) provided sensitizing concepts that can contribute to middle range theory development.

Smoking during pregnancy is a major public health problem that endangers the mother and her fetus. Postpartum smoking is a continuing threat to mothers and children. More qualitative theoretical studies focusing on pregnancy and postpartum smoking cessation and smoking relapse are needed to positively influence this major public health problem. Therefore, a substantive grounded theory based on interpretations of the experiences of mothers who have smoked, stopped smoking during pregnancy, and made difficult choices about resuming smoking after childbirth provides important information for intervention in this critical area of health care.

CHAPTER 3
METHOD

Research Approach

The purpose of this study was to develop a substantive grounded theory about smoking choices during pregnancy and the postpartum period. A substantive theory is generated for a specific, circumscribed, and empirical area of inquiry (Hutchinson & Wilson, 2001). Understanding postpartum smoking relapse and maintenance of cessation sets the stage for specific interventions aimed toward more effective sustained abstinence strategies. The grounded theory method, developed by Glaser and Strauss (1967), is an inductive qualitative method which guided the research and interview questions as well as the data collection strategies and methods of data analysis (Hutchinson & Wilson, 2001). The philosophical foundation for this method is symbolic interactionism (Blumer, 1969).

Understanding smoking choices during pregnancy and the postpartum period from the perspective of postpartum women should promote the development of more effective sustained abstinence strategies. Grounded theory was selected because it deals with what is actually occurring, defined and prioritized from the perspective of the pregnant or postpartum woman. The researcher enters the world of the participant with theoretical sensitivity and with the goal of eliciting what is actually happening without predetermining the outcome.

Symbolic interactionism provides the framework for the grounded theory method of research (Blumer, 1969) and assumes the interactive nature of the problem under study, continued smoking cessation or relapsing after pregnancy. Postpartum women interact with their babies and with themselves in their role as mother. They continue to interact with significant others, other family members, and with the health care system for themselves and their children. The mothers also are interactive members with society. Past experiences with smoking, smoking cessation, and relapse influence their current experiences as mothers. Grounded theory provides the method to get inside the postpartum women's world to understand smoking choices from their perspectives.

Sample Selection

In grounded theory initial decisions for collection of data are based only on a general problem area, such as postpartum smoking relapse. A grounded theory sample is not pre-determined as in quantitative research where all members in a population have an equal chance of being selected and are statistically representative of the entire population (Morse, 1986). The majority of participants for this qualitative study were selected purposively and opportunistically (Germain, 1993) from the target population of pregnant and postpartum women ages 18 years of age and older who had smoked prior to their pregnancy. Unlike probability sampling in quantitative research, in purposive sampling participants are selected on the basis of their willingness and ability to articulate their insightful experiences in the area under study (Hutchinson & Wilson, 2001).

Initially this study was going to include women who were three months postpartum, ages 18 to 25, with only one living child. Participants must have reported a history of smoking prior to becoming pregnant and to have quit smoking no more than up to a year before becoming pregnant. Or, if they were smoking when pregnancy was determined, preferably they stopped smoking during the first half of the pregnancy but prior to delivery to experience a period of smoking cessation. The method for smoking cessation was unimportant; participants had to report that they had remained abstinent throughout the remainder of their pregnancy. Diversity of demographic backgrounds for participants was preferred.

Sample strategy

Obtaining participants for this research was extremely difficult and consequently delayed the research process by at least eight months. Because of the numerous problems, I employed many methods to obtain participants including visiting administrators at seven Duval County Health Department clinics that provided prenatal care. My brief presentation outlined the purpose of the research and how to refer appropriate patients. Because I received no referrals, I requested and received IRB approval to directly call patients, approach private practice health care providers, and post the flyer (see Appendix A) on a web-site. From clinic contacts, I made calls to patients from clinic lists of recent deliveries to inquire about the woman's interest in participating. This latter method was usually unsuccessful in finding appropriate referrals, often because telephone numbers were already no longer in service, the woman was not comfortable talking with a stranger without referral from a known trusted source, or prospective participants were often too early in their pregnancy, and

by the time they met inclusion criteria, they had moved and their current telephone numbers were not available. I made visits to a number of private practices to recruit participants and even provided lunch to a major obstetrical/gynecological practice in exchange for an opportunity to explain the research to the nursing staff. However, even after multiple contacts, no referrals were made.

Because participants were still few in number, I requested and received IRB approval to approach health departments throughout Florida and access patients at Shands Hospital. I also requested permission to seek telephone interviews that would be tape-recorded for local or long distance participants for women who might be uncomfortable or inaccessible for face to face interviews. I also expanded the potential pool of participants by requesting and receiving permission to interview women aged 18 or older, women with more than one baby, and women who quit during the first half of their pregnancy. The interview window was also expanded from three to six months postpartum.

I approached another county's health department and made numerous trips to comply with their provisions to conduct my research. I was finger printed by the police department in that county and interviewed by staff members at that health department. I was initially approved and with the assistance of an administrator, I made lists of potential participants from health records. However, prior to interviewing my first participant, I was told I could not continue to have access to patient records and had to destroy my recruitment lists. I was also informed I could only approach patients in the waiting area and had to use an informed consent prepared by the county health department's attorney. Their informed consent did not

appropriately represent my research. I felt ethically I could not comply with their new protocol so I withdrew from that site.

After leaving the other county health department, I approached women with babies in a waiting room at one clinic in Shands Hospital and inquired about their interest in participating in my study. After many hours of approaching women with babies, I obtained only one participant. I made arrangements to tape record a telephone interview with a local participant because she did not want to meet in person, but she never agreed to a final time for the interview and did not return calls, even after returning the informed consent and personal information questionnaire through the mail. I also made contact with another hospital affiliated family practice clinic and met with staff to explain my research and provide referral methods and flyers. There were no appropriate referrals from that site.

I presented the proposed study to professional groups and distributed flyers at those activities. The groups included professional meetings and continuing education dinners with physicians and advanced practice nurses. Through contacts at these presentations, a nurse midwife referred patients from the Magnolia Project, a clinic in the Duval County Health Department, and another nurse midwife in private practice also became an active source of referrals. Some of the most successful recruiting occurred through referrals from these advance practice nurses who related the research opportunity to patients during their appointments. If patients were interested in the study, the nurses asked permission to give me patients' names and telephone numbers and then patients were given a flyer. Nurses contacted me with the information, and then I made direct calls to the patient to establish a convenient time and location for

the interview and to clarify any questions. I also contacted the WIC Program (women, infants and children) in Duval County and the Injury Prevention Program for car-seats. Participants called from the WIC Program after viewing the posted flyer. Other participants and my personal acquaintances also referred participants into the study.

Theoretical sampling

In grounded theory, theoretical sampling occurs on the basis of emerging concepts (Patton, 2002). Theoretical sampling is the process of collecting data for theory generation, which occurs jointly with the coding and analysis of the data (Glaser, 1978). The need for theoretical sampling became evident after my first interviews. In order to develop a comprehensive theory about postpartum smoking cessation and relapse, theoretical sampling required expansion of criteria for participants to include women older than 25 years of age, postpartum women with other children, and women in their last trimester of pregnancy who were the mothers of other young children. I believed the diversity of experience offered by women who had been through pregnancy more than once would allow them to reflect on their previous experiences and add depth to the theory that was being generated. It also became evident from the data that the role of young children might be important in women's choices about smoking. Two older women who were smokers and had delivered children during the 1940s through '70s were selected in order to clarify the historical perspective of the emerging problem. In accordance with theoretical sampling, theoretical codes, such as "pausing" and "concealing," also guided data collection and analysis as expected in theoretical sampling.

Data collection was stopped when it was determined that no new conceptual information was available (Hutchinson & Wilson, 2001). Saturation became evident after the 19th participant was interviewed. Further interviews with established participants focused on clarification and expansion of previously obtained information. Confirmation of the substantive theory occurred during presentations to a community "stop smoking" support group and to health care professionals.

Sample demographics

This study included 19 participants who were interviewed over the course of eight months. Participants completed the "Postpartum Smoking Personal Information" form (see Appendix B) after signing the "Informed Consent" (see Appendix C and Appendix D) prior to the interview. The purpose of the demographics is merely descriptive, as is appropriate for grounded theory research (see Appendix E for selected demographics of participants). I interviewed nineteen participants in depth about their smoking choices and influences during pregnancy and the postpartum period. Two of these women were purposively chosen for theoretical sampling to clarify the historical perspective of the social taboo of pregnant women smoking. The demographic information form was not completed by these two women, who were in their '60s and '70s, because the information would have confounded the analysis of the descriptive demographic information that reflected women who were recently pregnant.

The women's ages ranged from 19 to 38 years of age with nine participants younger than 26 (see Figure 1). Self-described ethnic backgrounds included: one American Indian/Alaskan Native, six Black/African Americans, nine

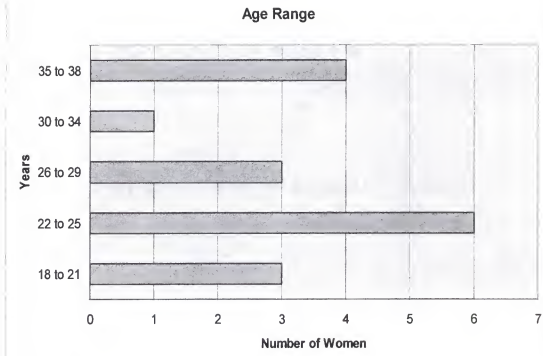

Figure 1 Age Range

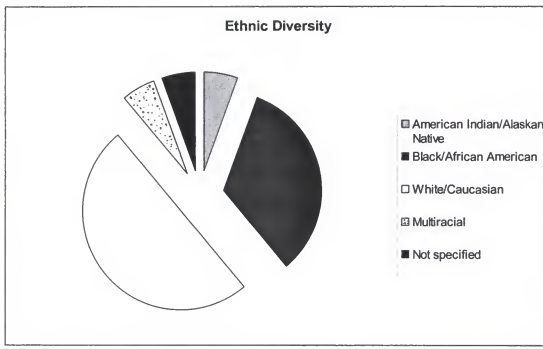

Figure 2 Ethnic Diversity

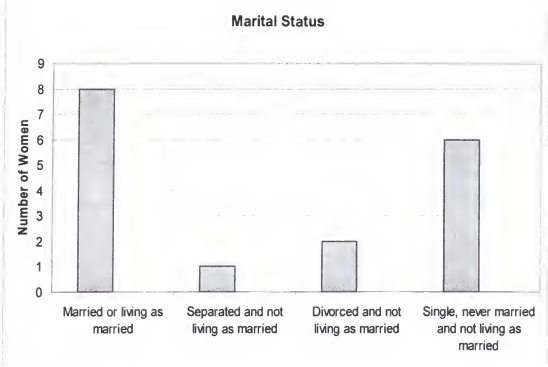

Figure 3 Marital Status

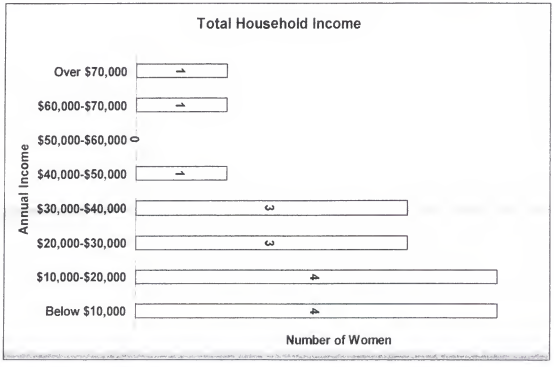

Figure 4 Total Household Income

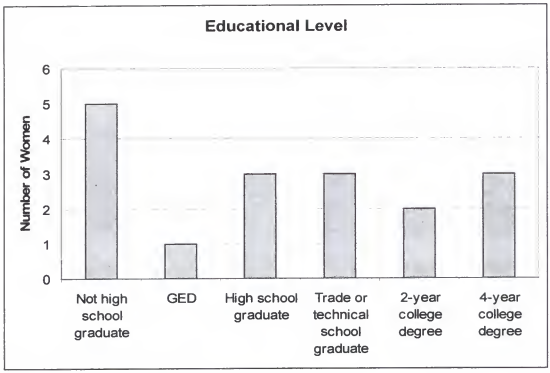

Figure 5 Educational Level

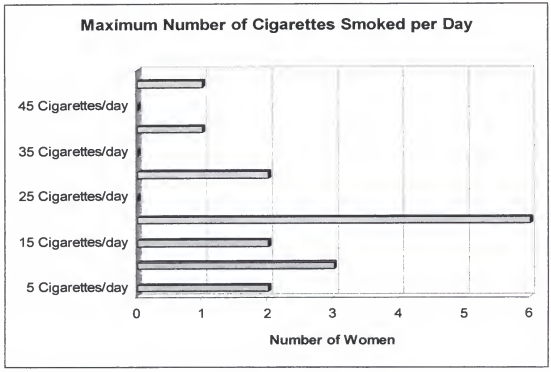

Figure 6 Maximum Number of Cigarettes Smoked per Day

White/Caucasians, one multiracial, and one not specified (see Figure 2). Marital status included: eight married or living as married, one separated and not living as married, two divorced and not living as married, and six who were single and had never married and were not living as married (see Figure 3). More than half of the participants had total household incomes at or below $20,000 and only two participants had total household incomes $60,000 and above (see Figure 4). More than half of the participants had only high school diplomas or less education and there were no participants with graduate level education (see Figure 5).

Only three of the 14 participants noted they had not breastfed their babies. The two participants who were still pregnant answered the breastfeeding question in relation to previous pregnancies; both acknowledged breastfeeding. Smoking initiation ages varied widely from ages 11 to 21 (with 17 as the median age to initiate regular smoking and 15.8 years as the mean age). Participants smoked from 5 to 50 cigarettes daily at the maximum height of consumption prior to stopping during pregnancy (see Figure 6). Only five of the participants were not depressed or sad during the previous year and had never received any type of intervention for depression. Finally, seven women stated they lived with someone who smoked, a significant other (six) and a mother (one).

The sample reflected ethnic diversity although there were no Hispanic participants. One fourth of the sample was in the lowest economic level, did not graduate from high school, and was single or divorced. This group had varied smoking patterns from five cigarettes to 30 cigarettes per day. Married women and/or women who had achieved higher levels of education had the higher incomes. Cigarettes

consumed by this group were usually at 20 per day though the range was 5 to 30 per day. White/Caucasians tended to represent the higher income levels and Black/African Americans represented the lower income levels, though both groups were represented throughout the range.

Procedure for Protection of Human Subjects

Each participant signed an informed consent (see Appendix C and Appendix D) and received a personal copy of the signed form. Anonymity was protected by not using the participants' names in any written reports. I assigned each participant a fictional name that was used on the transcripts and the personal information questionnaire, and will be used in any resulting publications. The fictional names were alphabetically selected according to the number of the interview. For example, interviewee #1 is called Alysha and interviewee #2 is called Beatriz. Immediately before the interviews I obtained the informed consents and personal information questionnaires and later secured them in a locked file in my home office with the transcribed interviews and tapes. Confidentiality of data was maintained in that only the dissertation committee had access to the anonymous interview transcripts. A monetary gift of $20.00 per interview was given to each participant to compensate for their time.

Data Collection and Recording

Interviews took place in relaxed, comfortable settings that facilitated disclosure of personal information about smoking and that afforded privacy for tape-recording. Settings included clinic offices, participant's homes, business settings, a park, my home, and even at a mall in a food court. The formal, semi-structured, tape-recorded

interviews lasted up to two hours (see Appendix F for Initial Interview Questions) but most interviews were approximately 60 to 90 minutes. The initial interview guide invited the participant to tell her story about smoking. Questions became more specific as the interview progressed. Information elicited included the causes, conditions, contexts, and consequences of these women's smoking choices during their pregnancy and postpartum period.

Because grounded theory is both systematic and intense and requires the simultaneous collection, coding, and analysis of the data, the questions evolved as the focus of the research changed, as determined by the ongoing data analysis (Hutchinson & Wilson, 2001). The interview questions evolved through the interviews by constant comparison of the data. According to the grounded theory method of research, after a focus of research emerged (the basic social psychological problem and the basic social psychological process), interview questions aimed to explore that focus while remaining open to other interpretations in the data. I took notes during the sessions and wrote memos as soon as possible after the interviews. The tapes were transcribed verbatim, double-spaced, with each line numbered by me or a transcriptionist.

Data Analysis

In grounded theory the researcher simultaneously collects, codes and analyzes the data beginning with the first interview (Hutchinson & Wilson, 2001). The purpose of continually referring to the data is to interpret a core variable which becomes the basis for the generation of the theory.

Core variable

Grounded theory assumes that the group being studied shares a common but unarticulated social psychological problem. This problem is addressed by means of the core variable/basic social psychological process (Hutchinson & Wilson, 2001). The core variable that is developed from the constant comparison method of data analysis and rigorous analytical thinking has six essential characteristics: 1) recurs frequently in the data, 2) links the various data together, 3) explains much of the variation in the data, 4) implicates a more general or formal theory, 5) moves the theory forward as it becomes more detailed, and 6) permits maximum variation in the analysis (Glaser, 1978). The grounded theory method facilitated the identification of a basic social psychological problem for the participants--imposed restrictions against smoking while pregnant, and a basic social psychological process (BSPP) women used in addressing the problem--reconciling incompatibilities during pregnancy and the postpartum period.

Coding

Three levels of coding assisted with theory generation. Level I open coding requires analysis of the data line by line, coding the data in every way possible to ensure full theoretical potential. Codes for level I may be in vivo using the words of the participants or may be substantive derived from the data (Hutchinson & Wilson, 2001). I coded the interviews on a line by line basis using both in vivo words and substantive terms. When a participant related that she relapsed back to smoking because of "stressing," this term became an in vivo code to describe a relapse condition using the participant's own words. "Craving cigarettes" is a substantive

term to describe participants' descriptions of longings to return to smoking. Level II coding aims to generate categories. Level II coding was facilitated by constantly asking myself, "What does this data indicate and what is really going on in this data?" "Craving cigarettes" and "stressing" came under the category of "justifying smoking."

Level III codes are theoretical constructs derived from both academic and clinical knowledge (Hutchinson & Wilson, 2001). Level III coding resulted in the description of a basic social psychological process (BSPP)--reconciling incompatibilities--which addressed the basic social psychological problem of imposed restrictions against smoking during pregnancy. Sensitivity to "coding families" provided a framework to identify emerging sub-processes. The six C's, the "bread and butter" of coding families, was the primary reference for the sub-processes and included causes, consequences, contexts, contingencies, covariances, and conditions (Glaser, 1978). The basic social psychological problem is addressed in Chapters 4 and 6 and the basic social psychological process that addresses the problem is described in Chapters 5 and 6.

Memoing and sorting

Memoing is a regular and critical part of the grounded theory process and begins with the first data collected (Hutchinson & Wilson, 2001). Memos are the written record of the analytic process and show the theory developing step by step (Corbin, 1986). Three categories of memos were made immediately after each interview: personal, methodological, and theoretical. Personal memos allow the researcher to be reflexive and bracket personal experiences or biases that might otherwise affect the analytic process. Methodological memos focus on the actual

method of data collection during the session and reflect problems that occur as well as methods that work well. Theoretical memos are both inductive and deductive: inductive memoing is conceptualizing the data while coding and deductive memoing assesses how the concepts fit together (Hutchinson & Wilson, 2001). Memos allowed me to modify subsequent interviews. Written notes kept during the interviews contributed to the memoing process.

During the process of analyzing the data, sorting followed the naming of numerous codes. This sorting is essentially the sorting of ideas and not data (Glaser, 1978). Sorting also clarifies where the theory is thin and where it is dense and guides further data collection. Sorting also led to further memoing which also included diagramming the emerging concepts. Through the repetitive, circular process of interviewing, memoing, coding and sorting, a core variable or basic social psychological process was identified which addressed the basic social psychological problem.

Rigor in Qualitative Research

Unlike quantitative research, grounded theory research is not assessed for statistical generalizability but rather for conceptual generalizability (Hutchinson, 1993). Likewise, reliability and validity are not applicable to qualitative research; rigor in qualitative research is assessed through criteria of credibility, fittingness, and confirmability (Sandelowski, 1986). A qualitative study is credible when it presents human experience in a recognizable form by the participants in the experience and by others who recognize the experience in their reading. A threat to the truth value of qualitative research rests in the closeness of the investigator-participant relationship.

Credibility can be enhanced when investigators separate their own experiences from their participants by maintaining awareness of how they influenced and were influenced by the participants. Personal memos help assure that researchers are introspective and aware of their subjective experiences as they relate to the research process. Credibility has also been described as consisting of three distinct inquiry concerns (Patton, 2002): rigorous methods for doing fieldwork that are analyzed systematically with emphasis on issues or credibility, the credibility of the researcher (which is reflected in training and experience), and the philosophical belief in the value of qualitative inquiry.

A qualitative study "fits" when the findings are relevant for the study situation and when the audience finds the results meaningful and applicable in terms of their own experiences (Sandelowski, 1986). Another criterion for rigor in qualitative research is auditability. A study is deemed auditable when another researcher can arrive at comparable conclusions given the researcher's data, perspective, and situation. Auditability is also achieved if another researcher can follow the investigators decisions including memos and coding. Retained memos and transcripts provide an audit trail in this study. Peer review of coding and analysis with my professor and review of the results with another doctoral colleague enhanced rigor.

Ethical Issues

Ethical considerations were embedded throughout the research process. Ethical issues include assuring that participation was informed and voluntary. Many potential participants refused to participate and their decisions were respected; coercion was not used to obtain "another interview." The informed consent clearly

stated the purposes of the research and informed the participant of their right to withdraw at any time during the interview process without any penalties. This was also reinforced verbally to participants. Respect was shown to the participants by monetary compensation for their time. Respect was also exhibited throughout the process of the interview by adhering to time constraints and accommodating interruptions. Care was taken to facilitate the participants telling of their story about smoking and pregnancy and childbirth in a way that was non-judgmental. The interview process seemed to provide a space for participants to reflect on their entire experience and may contribute to future healthy decisions about smoking. Confidentiality, privacy, and anonymity are also ethical considerations that were achieved through allowing the participant to determine the time and site of the interview, using code names for all written material, and maintaining all original materials in a secured file.

I became interested in the study population after counseling patients to stop smoking at the Nicotine Dependence Center at Mayo Clinic and in my work with tobacco addiction in the military. I wanted to study fetal tobacco exposure and address the addiction struggles of young women at a point in their lives when their addiction affects both themselves and their family members. A potential ethical issue for nurse researchers studying this particular clinical area is that of role conflict. As a psychiatric nurse practitioner specializing in the treatment of tobacco addiction, my goal is to change the behavior of my patients within a therapeutic relationship. As a nurse researcher my goal is to listen carefully to personal experiences and interpret the messages into substantive theories that illuminate lifestyle/health care decisions,

thereby paving the way for clinical interventions. During interviews I found myself slipping into therapeutic interpretations of their stories which would have been appropriate in a counseling setting but was inappropriate in research. I also felt that if I could provide minimal counseling and give educational materials after the completion of the research interview, I would be adding additional positive compensation for participation in my study. However, I learned that the role of researcher didn't necessarily end at the completion of the session because follow-up interviews were sometimes required. Counseling in a research interview directly influences the participants' experience and responses to me. Participants could feel criticized about their smoking and therefore, could be less willing to share their thoughts, feelings and difficulties with smoking. They may, instead, try to please me and see me as counselor rather than as a non-judgmental researcher. Over time recognition of this role conflict resulted in my avoiding providing tobacco addiction information at the end of the session and remaining in the role of the researcher. This role change, however, continued to create an internal conflict for me because of my strong beliefs about the deleterious effects of tobacco on women and their families. However, I resolved the conflict by recognizing the incompatibility of engaging in grounded theory research and therapy and/or education with the same person.

Another conflict that I had was the difficulty I experienced actually conducting the interviews. Initially I constructed a very thorough, theory based interview format based on an extensive review of the literature. In a real sense if I had conducted formatted interviews, I would not have been engaging in grounded theory research. Grounded theory is not meant to be preconceived but rather empirical with the goal of

discovering what is going on from the perspective of the participant. In my attempt to be thorough, I was forcing the interview into a rigid structure that was more about my logical expectations based on an extensive literature review than it was about what was actually happening from the participant's life experiences.

I made significant modifications to my initial interview format prior to conducting my first interview. However, when I began interviewing participants I had difficulty remembering that the interview questions were meant to be a taking-off point and not an absolute guide. I had difficulty carefully listening to my interviewees because in my mind I was already going on to the next question and making mental connections between my literature review and what they were telling me. Subsequent follow-up questions, I would learn later reading the transcriptions, often diverted the natural flow of the participant's story, thereby limiting thoroughness and depth in interviews. Participant's unforced revelations of their experiences are the basis for grounded theory. As I continued interviewing I understood the process problems I was having conducting interviews and improved with experience but I still struggled to stay participant-centered and let go of my own internal dialogue that threatened once again to divert the process.

Qualitative research has analytical generalizability included: rather than statistical generalizability (Hutchinson & Wilson, 2001). Relevance of the theory to explain social phenomena is essential to developing a substantive theory. The following chapters present the findings of the grounded theory research. Chapter 4 focuses on the basic social problem of women who were addicted to smoking and who were pregnant.

CHAPTER 4
IMPOSED RESTRICTIONS ON SMOKING DURING PREGNANCY — THE BASIC SOCIAL PROBLEM

Citing health risks to their unborn children, women frequently quit smoking during pregnancy. Indeed, women often relate that pregnancy is the first and only time in their lives they have made serious attempts to quit smoking. Though there may be months of smoking abstinence, only about one-third of women who stop smoking during pregnancy are still abstinent one year after delivery (Surgeon General, 2001). Mothers acknowledged both personal and familial health threats related to smoking. Although many related difficult yet successful experiences with quitting smoking during pregnancy, most relapsed after delivery.

The purpose of this study was to develop a substantive grounded theory on smoking cessation and relapse during pregnancy and the postpartum period. The aim was to understand how women make decisions about quitting smoking and actually stop smoking during pregnancy, a defined developmental stage of life, and then either remain abstinent in the postpartum period or resume smoking. Originally the research intent was to focus primarily on the postpartum period and to explore fully women's successful experiences of maintaining smoking cessation. However, through the process of conducting interviews with postpartum women, it became clear that to fully understand women's perceptions about postpartum smoking or abstinence, the focus needed also to include their pregnancy. For purposes of this study, childbearing is

examined as a two-staged developmental process that consists of pregnancy and the postpartum period. The basic social problem identified during pregnancy and the process of addressing the problem continued to influence smoking choices after the baby was born.

In this chapter the basic social psychological problem, "imposed smoking restrictions during pregnancy," is discussed. According to the grounded theory method, a basic social problem is grounded in the data and is interpreted from the shared experiences gathered through interviews. Women who smoked and shared the common circumstances of pregnancy and childbirth experience shared meaning and behaviors which helped to shape a specific social psychological problem. Imposed smoking restrictions for women during pregnancy was the basic social psychological problem that was interpreted from the data in this study of pregnant and postpartum women.

This chapter begins with a focus on smoking addiction. The dilemma of quitting smoking is not fully appreciated unless the attachment to smoking is understood. Then smoking during pregnancy as a social taboo is addressed. The historical context of women smoking from the beginning of the twentieth century to the dawn of the twenty first century places the social taboo in perspective. The messengers of the social taboo, which include significant others, family and friends, the generic "everybody," health care providers and the media, are given voice through the participants.

Attachment to Smoking

In order to fully understand the dilemma pregnant smokers experienced, it is first important to understand the meaning of smoking in their lives. Most of the women acknowledged that if they had not become pregnant, they would have never thought of quitting. Natalie's words are similar to those of many of the participants, "I just smoked until I got pregnant. I never thought about quitting. I didn't have the desire to quit." Smoking was integral to Fran's life, "It felt like breathing to me. . . . I never thought I wouldn't smoke. I always thought I would." To many of the women, smoking was a behavior that had begun early in their lives, and they expressed their relationship with cigarettes almost as a longed for, ongoing, intimate relationship. Smoking was expressed as a craving that demanded their attention and as a stress reliever that became a way of getting through the daily difficulties in life.

Smoking, a Love Story

Like the author Caroline Knapp noticed about her own drinking in her personal memoir, *Drinking, a Love Story*, (1997) participants described smoking as a love story. Jamie gushed her feelings about smoking, "I love to smoke. I mean I love to smoke." Missy's experience with smoking was also a love story:

> I know that I'm going to die anyway and you say, well I'm gonna die, I might as well die happy smoking. And if smoking wasn't bad for me and didn't do anything, I would smoke for the rest of my life. I love smoking. Cigarettes are awesome, they're good for you [laughs].

Loving smoking included enjoying the allure of the physical sensations derived from smoking. Olivia related her feelings, "It was a high, it was like a big head rush, and

like that a couple of times, just, just like a lot of head." Linda expressed similar sensations, "I had gotten kind of a head rush . . . It kind of altered my body."

Smoking, a Never Ending Craving

Smoking was described as a craving and a basic need. Fran talked about smoking as a basic need, more so than even a desire:

> Everybody smokes and I've never thought about the money, even when we were having no job . . . I got my cigarettes. I would not buy something else and I would get my cigarettes, 'cause that was something I needed . . . I wanted it but it was also a need.

Fran admitted to mixed feelings about smoking, "I was doing it because I wanted to and I felt like I needed it, but at the same time I felt so bad every single day, but I'd go right on back and keep doing it." Smoking cessation didn't end the relationship with cigarettes for Fran, "The whole time I was pregnant I wanted a cigarette, so it wasn't like I put it out of my mind and that was it. It was a fight." Fran talked about not smoking during pregnancy almost as a void, "I spent the whole time, ooooh, I'm missing something, something is missing, something is missing." Alysha cut right to the heart of smoking for herself, "I need me a cigarette. . . . I want me a cigarette," when asked to clarify her desires to smoke.

Smoking, a Fix

An addiction counselor explained that the term "fix" is often used by addicts to describe the immediate relief they experience when they use their chosen substance of abuse, such as heroin, cocaine or alcohol. The relief experienced is often associated with withdrawal symptoms; however, the relief does not last long. The term also applies to smoking. Members of a community "stop smoking" support group

described a fix as "short term satisfaction" and something that "fixes the problem" and "makes things better." They equated a "fix" to getting a "hit." Smoking provided a fix for Ginny, "it's relaxing . . . there's a relaxation feeling that I can get from smoking. . . Every time you get stretched out of something and you're like, I knew that feeling, that inhaling feeling and relaxation feeling could be just outside the door if I wanted to." Seeburger (1993) in his book, *Addiction and Responsibility* described use of the addictive substance as tranquilizing but notes that the relief achieved may take larger or more frequent doses to achieve the same result and that after the supply is cut off a rebound may occur, making the user restless, irritable, and discontent. Seeburger also described the addictive substance as disburdening in the sense that it is distracts the user from life's boredom, routine, uncertainty, and frustration.

Participants described smoking as a quick fix for tension and boredom. Linda reflected that for her cigarettes were convenient anti-stressors:

> I think I may have had a few cigarettes here and there. Not habitual . . . just if there was a stressful situation. . . When I have stress from different things . . . I would still pick up a cigarette now and then. . . . To me I think what it is, that I haven't found the right form of like de-stressing. . . . If it is to the point where it is a problem or a stress that just invades my whole body, I can just feel it from head to toe, and it has just been one thing after another it seems like then that's when I think about doing it [smoking]. . . . I needed a cigarette outside just to get back, kind of in the game.

Jamie also acknowledged the role cigarettes played in managing her tension:

> If I'm stressed out, it calms me down, it gives me a minute to think, especially at work. We get stressed, we step out to take, you know, smoke a cigarette and I'll calm down. It's the same thing when I'm upset, talking on the phone. It's just a break from whatever my normal routine is . . . it's definitely a stress reliever, that's the reason I smoke.

Emma justified smoking because of the role it played for disburdening her life stressors during her pregnancy:

> There was just so much stress this time . . . I had really big family things happening, really big job things happening . . . the cigarette here, the cigarette there was mostly from I had just gotten off the phone with my mother and found out something more about my family that, you know it's just been really rough this past year and I would run to a corner to have a cigarette instead of crying and having my makeup all over my face so I get back into work. Have a cigarette, calm yourself down.

Smoking was a distraction from boredom for Alysha, "Like before I even got pregnant I would think, hmmmm, nothing to do, I want a cigarette."

Smoking as a fix reflects the use of tobacco an addictive substance. The women themselves were often all too aware of their addiction. Alysha clearly stated, "People don't understand. Nicotine is addictive, it is very addictive." It became evident that smoking was a longed for sensual experience that made life easier. Smoking was perceived as basic to helping the women navigate life and its numerous stressful problems. From the book, *Addiction and Grace*, addiction attachment is defined, "Addiction attaches desire, bonds and enslaves the energy of desire to certain specific behaviors, things, or people. These objects of attachment then become preoccupations and obsessions; they come to rule our lives" (May, 1988, p. 3). Participants clearly described their own strong attachment to smoking.

Social Taboo: Imposed Restrictions

Women who were pregnant in the twenty first century expressed strongly held beliefs against smoking during pregnancy. The universal belief was that it was very wrong to smoke while pregnant. The combination of the strong desire to continue smoking and the strength of the prohibition to smoke during pregnancy created a

social taboo that imposes restrictions against smoking for pregnant women. Taboo, a Polynesian word (Brill, 1995), involves prohibitions against concerned actions for which there exists a strong desire. Freud discussed taboo concepts in his writing, *Totem and Taboo* [1912-1913]. He described two branches of taboo: the sacred and consecrated as the first branch and the second as the dangerous, forbidden, and unclean, which would include smoking while pregnant. Taboos have been called the oldest unwritten code of law of humanity. Freud suggested that there are many foci of the taboo such as guarding the chief acts of life (e.g., births, initiations, marriage, and sexual functions) against interference.

A taboo can also be viewed as a social behavior that reflects a society's response to its environment (Ember & Ember, 1981). An example the authors cited is that of postpartum sex taboos present in tropical areas that prohibit women from engaging in sexual intercourse until their two-year olds are ready to be weaned. Though it may seem peculiar to an outsider, the taboo may protect the baby. If the mother had another baby soon after the infant was born and had to discontinue nursing, the baby might be at risk for kwashiorkor, a severe protein deficiency disease that is common in tropical areas. The taboo in this example provided a better chance of survival for infants.

British anthropologist, James George Frazer, devoted an entire volume of his third edition of *The Golden Bough* [1906-1915] to *Taboo and the Perils of the Soul* (Holden, 2000). He identified taboo as a type of negative magic because it involves ritual avoidance behavior. He contrasted this to positive magic which may be used to achieve posterity. Frazer classified taboos into tabooed acts, persons, things, and

words. He also defined taboo as the name given to a system of religious prohibitions, which attained its fullest development in Polynesia but existed under different names in most parts of the world.

Historical Perspective

In our culture over the last ten years, smoking has become socially taboo for obviously pregnant women. In order to understand the evolution and current impact of the taboo, it is important to place the use of tobacco by women into a historical perspective. In the 1800s ladies did not smoke. Private experimentation with cigarettes was not acknowledged publicly (Amos & Haglund, 2000) perhaps because smoking by women in North America and Europe had been associated with loose morals and dubious sexual behavior. At the dawn of the twentieth century, smoking among women was limited to the very rich and the "indecent" (Fielding, 1987). In 1908 a woman in New York was arrested for smoking in public, and in 1921 a bill was proposed in the U.S. Congress to ban women from smoking in the District of Columbia (Amos & Haglund, 2000).

By the end of the 1920s there were notable gender differences concerning smoking. The cigarette evoked images of power, authority and independence for men, while for women the cigarette "represented rebellious independence, glamour, seduction, and sexual allure and acted as a flexible symbol for both feminists and flappers" (Brandt, 1996, p. 64). By the 1930s cigarette advertising was commonplace in women's magazines with themes of sexual attractiveness, athleticism, and slimness (Hanson, 1994). Cigarette advertising was prevalent on radio and television by the 1950s and 1960s. In the late '60s Virginia Slims was introduced as the first brand

exclusively targeting women. Subsequent brands for women include Eve, Silva Thins, Satin, Kim, Charm, More, and Ritz. Clearly the names of the cigarettes were chosen for their allure.

Congressional legislation banned cigarette advertising on television and radio in 1971 (Siegel, 1998). Cigarette smoking was becoming more of a public health concern at that time. Ironically, tobacco corporations supported the ban because continued airwave advertising under the Federal Communications Commission (FCC) policy was becoming detrimental to marketing cigarettes. The background for the ban began with a 1949 FCC policy, the Fairness Doctrine, that required broadcasters to air both sides of all controversial public issues. So on July 1, 1967 the Federal Communications Commission ruled that broadcasters had to air one antismoking message for every three cigarette commercials. The antismoking advertisements were almost six times as effective as cigarette advertising during the period they were aired. The broadcasting ban was supported by the major tobacco corporations; they specifically requested that it be codified in a statute so they could avoid charges of collusion and other violations of antitrust law (O'Keefe & Pollay, 1996). After cigarette advertising was banned on the airwaves, the number of cigarette advertisements increased substantially in women's magazines. By the late 1980s the tobacco industry ranked second in magazine advertising, sixth in newspaper advertising, and was the largest spender in outdoor advertising (O'Keefe & Pollay, 1996).

The cigarette came to represent both rebellion against current social mores for women as well as the mores of the rising culture of consumption. The social messages

of women smoking shifted from being a symbol of being bought by men (prostitution), to being like men (mannish/lesbian), to being able to attract men (glamorous/heterosexual), to being equal to men (feminism) and being your own woman (emancipation) (Amos & Haglund, 2000). Women who were pregnant in the '40s, '50s and '60s received social messages that were favorable to smoking and virtually silent on the question of smoking during pregnancy and beyond.

A 76 year old mother of two children born during the '40s and '50s remembered:

> There was nothing spoken, never spoken about smoking. . . the doctors all smoked, everybody smoked, everybody smoked. Smoked all over television, smoked all over movies, they smoked everywhere. Everybody smoked. . . There were no places that you couldn't smoke.

She continued to reflect that she must have smoked after her cesarean section because she didn't remember quitting and didn't recall a smoking section in the hospital where she delivered. Another woman, aged 65, mother of two children with pregnancies nothing was said. Then we had to go to a fertility specialist and when I explained my during the '60s and '70s stated:

> None of my physicals or doctors appointments, up until the time I was pregnant, did anyone mention anything about stopping smoking. So background that covered alcohol, a member of AA, etc., there was nothing said about stopping smoking.

The first historic Surgeon General's report committing the government to take action against smoking to protect the public health of the population was released in 1964 (Pierce & Gilpin, 1995). Hospital tobacco policies from the '60s to the present reflect evolving awareness of health concerns. In a letter to the editor of the *Post Bulletin* in Rochester, MN, August 1, 1969, concern was expressed that cigarettes

were not only permitted in Mayo Clinic but were also being sold from carts in hospital corridors (Porter, 1969). The letter writer contrasted Mayo's policies to the ban on the sale of cigarettes and removal of cigarette machines at Johns Hopkins University School of Medicine and School of Hygiene and Public Health and also the banning of smoking by patients in U.S. Air Force medical facilities unless a physician provided written permission. Mayo Clinic responded to the letter by stating that refusal to sell cigarettes would only be an inconvenience and would not affect an individual's decisions about smoking. Mayo Clinic also stated that smoking has never been permitted in the lobbies or other patient-frequented areas but did not presume on an institutional basis to decide whether or not a member of its staff or a patient should or should not smoke.

Apparently smoking during pregnancy was acceptable even into the '80s. One member of a Jacksonville community smoking cessation group commented about her postpartum hospital experience in 1985. She remembered being asked to wash up before the babies were brought from the nursery, but she related there was smoking in the rooms with the babies present and couldn't remember any precautions about smoking around the baby. By the late '80s and early '90s the tide turned and smoking became restricted in medical facilities. On June 29, 1987, Mayo Clinic Medical Center became "Smoke-Free" (Mayo Clinic, 1987). This smoke-free policy included Saint Mary's Hospital and Rochester Methodist Hospital in Rochester, MN. It was also determined that Mayo group practices in Jacksonville, FL and in Scottsdale, AZ would be smoke-free at the time of their respective openings. Hospitals across the country followed suit as reflected in a letter to the editor of the *American Journal of*

Psychiatry (Pinta, 1991) citing that, like many hospitals across the country, Ohio State University Hospital in Columbus, Ohio adopted a "modern-progressive" smoke-free policy on March 31, 1991.

The mid-'90s introduced more restrictions to curtail tobacco advertising and access of minors to tobacco (Davis, 1995). Litigation against tobacco companies also raised public awareness of the dangers of tobacco. Secret documents from the tobacco industry revealed previously known dangers of smoking that had been determined in state-of-the-art laboratories with in-house funding by tobacco corporations that exceeded any scientific published literature of the time (Hurt & Robertson, 1998). In August 1997, Florida won an $11.3 billion landmark victory settlement against the tobacco industry (later raised to $13 billion). The settlement funded the "TRUTH" campaign, a multi-media campaign that included television, radio, and outdoor advertising, which targeted young people to consider the information about tobacco products and tobacco industry manipulation and make their own decisions about what was best for them (Hicks & Zucker, 1999). The combination of litigated restrictions, increased anti-tobacco activity by medical establishments, and media campaigns against tobacco contributed to the social taboo against smoking while pregnant in the late twentieth century.

Social Taboo and Medical Science

The major explanation for restricting pregnant women from smoking is concern for the health of the fetus. Early in the twentieth century smoking was socially taboo for women. When tobacco corporations recognized the market potential of women smokers, women were targeted for smoking associating use of tobacco with

women's liberation. Medical science essentially resurrected the concern for women of childbearing age who smoke because research identified the deleterious effects of smoking on the fetus and child. Cigarette smoking is associated with increases in perinatal mortality and morbidity rates. Maternal smoking has been associated with reduced birth weight, increased risk of low birth weight, shortened gestation and an increased risk of preterm birth, and intrauterine growth restriction (Wang et al., 2002). The researchers noted tobacco smoke contains approximately 4,000 compounds, which include important carcinogens such as polycyclic aromatic hydrocarbons (PAHs), arylmines, and N-nitrosamines. Cigarette smoke exposure causes harmful effects in utero such as increased asthma symptoms and reduced lung function during the neonatal period, increased airway responsiveness to inhaled stimuli, and an increased risk of sudden infant death syndrome (Elliott, Carroll, James, & Robinson, 2003).

Nicotine may affect placental development and sufficiency because of its effects on the vascular system (Van Gilder, Remington, & Fiore, 1997). Nicotine shrinks the placenta's blood vessels and hampers oxygenation and feeding of the fetus (Frydman, 1996). The development of the fetus depends upon the quantity of oxygen provided by the mother and this is affected by both nicotine and carbon monoxide that cross the placenta (Spinillo et al., 1995). Other harmful effects of maternal smoking are related to the combined effects of nicotine, tar and carbon monoxide contained in smoke which cause chronic fetal hypoxia. Cigarette smoking and nicotine's association with human congenital malformations is unclear (Van Gilder et al., 1997) but harmful effects to children born to women who smoked during pregnancy include

neurological abnormalities, developmental delays, respiratory infections, asthma, ear infections lower intelligence quotient scores, behavioral problems, attention deficit hyperactivity disorder as well as vascular diseases in later life (Britton, 1998).

Based on current research, if the health of the fetus were the whole story, the restriction would extend to the new fathers-to-be who would be pressured to not smoke around their pregnant companions. Research warns of the danger of environmental tobacco smoke for pregnant women (Surgeon General, 2001). Cotinine, used as the marker for cigarette exposure, showed that babies born to non-smoking mothers who were passively exposed to tobacco smoke were an average of 108 grams lighter than babies born to unexposed mothers. Logically the smoking restriction should remain in place after delivery for anyone who regularly has contact with the baby because of the dangers of environmental tobacco smoke. The social taboo imposing absolute restriction of smoking for the pregnant woman in this study, however, ended at delivery and the smoking restriction never included extended contacts with other smokers.

Violation of the Social Taboo

Freud stated that taboos were avenged in different manners. If the taboo was related to gods and demons, automatic punishment was expected from the power of the godhead. In other cases society took over the punishment of the offender. "The violation of a taboo makes the offender himself taboo" (Brill, 1995, p. 791). Participants not only felt criticized for violating the social taboo, but they criticized others and themselves. Experiencing criticism from others and giving it to others and the self occured within the context of social interaction as described by symbolic

interactionism (Blumer, 1969). Messages, interpreted as criticism, occurred through social indications to others and to themselves. Criticism was experienced through interpretation of the messages in ways that were meaningful to the individual.

Feeling criticized

Pregnant smokers felt criticized when caught smoking. The point of concern in public occurred when the woman appeared pregnant or others knew she was pregnant. Pregnant women who smoked spoke of feeling stigmatized and expressed their smoking during pregnancy in moralistic terms such as "bad" and "wrong." Pregnant women in this study experienced both verbal and non-verbal admonishments. These critical messages were delivered when the obviously pregnant woman was caught in the act of smoking or in the act of acquiring cigarettes.

Emma related her daughter caught her smoking secretly outside and decried, "Mom, you have a baby inside of you! What are you doing? You're poisoning my baby!" Emma acknowledged previously telling her daughter that smoking was harmful to unborn babies and experienced guilt when caught in the act of smoking while pregnant. Missy related her mom's verbal attacks, "My mom was so mad that I was smoking. She's like, 'that baby is sitting around in a telephone booth with smoke filling it up. How would you like that?'" Note the powerful visual imagery that Missy's mother used to get her point across. Jamie guessed that she was seven or eight months pregnant when she experienced the following embarrassment, "I went into the store to buy cigarettes and people looked at me like I was the devil. It was pretty bad. I just said they were for my boss and nobody bought it." Jamie expected

others to disapprove of her behavior and concocted a cover story but realized they knew she was lying.

Criticizing others

Participants, though they had struggled with their own smoking addiction, expressed that the sight of other pregnant women smoking aroused personal feelings of disdain and anger and they believed others felt as strongly as they did. Roz expressed a strong, visceral reaction when she saw pregnant women smoking:

> Ooooh, she shouldn't be doing that, ooooh, that's bad. . . . When I see someone pregnant smoking, [what I envision] is the baby inside in a little bottle of smoke. That's just what, that's just what I think of it, a baby and a little bottle of smoke and its suffocating. Cause they're in a little enclosed space. It doesn't go there, the smoke and stuff doesn't go there, but that's just what I see.

Ivana, a professional woman who continued to struggle with smoking in the postpartum period, described her advice to other women who are pregnant and smoking:

> I think it is ugly and selfish. . . . I tell my clients all the time if they're pregnant and they're smoking [not to smoke]. I call them into my office and if they were outside smoking I tell them, have a long speech with them before we start anything. You shouldn't be smoking, you know, it's bad for the baby. When you smoke, the baby is smoking. Just get a cigarette to the baby and let him light it.

Ivana had difficulty stopping smoking during her own pregnancy and reacted strongly with sarcasm when she saw other pregnant women violating the taboo. Kesha also reacted strongly to other women smoking while pregnant:

> I think they shouldn't do it because it is going to affect their health and their baby's as well. I think it's the wrong thing to do. . . . In our society I would say most people don't agree with women smoking who are pregnant and they're right. Because most people are very educated, they say, "no." It is not the thing to do so I would be very against it.

Kesha had such strong feelings against women smoking while pregnant that she took the taboo to a higher level by proclaiming, "I think cigarettes should be banned. There should be a law to prevent pregnant women from buying cigarettes." Placing smoking while pregnant into the crime category was affirmed by the comment a middle-aged male smoker made during a smoking cessation group as the "costs of smoking" were being reviewed:

> I think smoking while pregnant is the ultimate crime. It is criminal that a woman would keep smoking and possibly harm her baby and not even try to quit smoking. In this day and age we know what smoking can do and it is criminal.

Interestingly this male was struggling with his own decision to quit smoking.

Criticizing self

The process of criticizing self is integral to the theory of symbolic interactionism. Self-interaction is a process used in forming and guiding personal conduct through designating things to the self (Blumer, 1969). Analysis, evaluation, and judgment of the self-designations lead to plans and actions. Self-criticism is a product of the process of self-interaction. Jamie shared her self-awareness of the social taboo and the stigma she inferred for herself when she smoked while pregnant:

> I hate the way it looks personally. I mean, like, I wouldn't even, when I got the cigarettes [when pregnant] I would rarely smoke them where people could see me, cause I think it looks just so tacky, you know it really does. I mean it seems to show a disregard for your baby and so whether I personally believe that or not, because I happen to believe that after a certain point it's really not that harmful any more than breathing air in L.A. But it also sounds like a justification, and rightly so, because it is. So I was more aware of that and because I do know that it can harm some people.

Jamie was open in her reflective self-criticism for a behavior she loathed while pregnant.

Missy's self-criticism showed awareness of the social taboo of smoking while pregnant. She verbalized her thoughts about what she believed others would think if they saw her smoking in public while visibly pregnant, "Look at that terrible woman, what is she doing smoking while she is pregnant? Doesn't she think about that baby?" Missy internalized these projections and agreed with the criticism she expected from others by saying she thought she was selfish to smoke while pregnant because the baby doesn't have a choice. Fran expressed self-condemnation as she criticized herself smoking while pregnant, "I felt like I was doing something that I really shouldn't be doing, but I couldn't stop and probably I couldn't because I didn't want to. I wanted to but I didn't want to, that's the guilt." Awareness of the social taboo and support of it was not sufficient for complete smoking cessation for the participants but it did contribute to guilt and movement towards stopping smoking.

Messengers of the Social Taboo

Currently smoking while pregnant is a social taboo in the United States. The prohibition is expressed to pregnant women by a number of sources that are both personal and systemic. Personal messengers of the taboo against smoking while pregnant include the significant other, family, and friends. Systemic messengers include health care providers and the media.

Significant other

The participant's husband or significant other often spoke against smoking while pregnant. Ginny's husband, a non-smoker, had always hated the smoking, "He was thrilled to death when I was going to quit." Jamie said, "[My husband, a non-smoker] is very driven and I knew that if I smoked he'd smell it and I'd be in a whole

bunch of trouble so that was a little bit of my motivation." The father of Alysha's daughter "did not like me smoking cigarettes at all . . . even before I got pregnant, he did not like me smoking," but she related that he smoked Black Niles. The smoking status of the significant other did not seem to influence the advice for the pregnant partner to quit smoking. Rather the partner viewed their own smoking as irrelevant.

Pregnant smokers recognized the double standard of the smoking partner speaking against smoking and at times resented this, especially if the significant other smoked in close proximity to them. Kesha noted that the father of her daughter, "Would light up a cigarette [in the car with me] and then that makes me want one." Kesha said his resistance to her smoking was hypocritical because he would say, "No, you can't have a cigarette, but at the same time he smokes right in front of me. That's what made it really hard." Beatriz's baby's father also didn't want her to smoke but "he felt it was all right for him but not me." Apparently there were no concerns for the potential effects of environmental tobacco smoke affecting the pregnant woman.

Other men continued smoking but removed their smoking from the presence of their pregnant partner; participants interpreted this behavior as supportive. Emma admitted her boyfriend, a smoker, was not happy about her smoking while pregnant, "and so I quit . . . he does smoke but he never smoked around me when I was pregnant, because he didn't want me smoking to begin with." Callie noted when she first met her boyfriend "he didn't smoke a lot but then when I got pregnant I think that kinda like increased the cigarettes some but when he came around me he didn't smoke so he work wid [sic] me, it was pretty good." According to research and the women's

feelings, the double standard for smoking that men employed with their pregnant partners was often at the detriment of the women and the unborn children.

The double standard is also reflected in a qualitative study addressing smoking and smoking cessation among men with pregnant partners (Wakefield, Reid, Roberts, Mullins, & Gillies, 1998). Male smokers in South Australia participated in focus groups to discuss their beliefs about passive smoking in pregnancy, barriers to quitting smoking in pregnancy, and their preparedness to support their partner's cessation. The men did not seem to connect second hand smoke to any negative effects for themselves or their pregnant partner and most frequently reported concerns about the annoyance caused to the non-smoker. Passive smoke was considered a non-issue around women who smoked; they felt the baby was protected inside the mother. When men were asked about supporting their partners to help them quit smoking, only a few said they would be prepared to quit as well; most said offering encouraging words would be the extent of their assistance. The men saw stress as a barrier to their pregnant partners quitting smoking. They viewed stress as a higher risk than continued smoking.

Family and friends

Family members provided strong voices against smoking during pregnancy. The same voices were often silent on the issue of smoking prior to the pregnancy and during the postpartum period. Kesha stated, "My father only minded when I was pregnant [whether or not I smoked]. He was so concerned about the baby. Otherwise he doesn't mind." Alysha commented on the different treatment she received from her friends while she was pregnant and after she had her baby:

> When I was pregnant they told me, "No, no you ain't gonna smoke, you don't need to smoke." . . . but after I had my baby . . . they didn't really say anything anyway because they know I was gonna do it anyway.

Callie's godmother also emphasized smoking cessation during pregnancy and lifted the restriction after childbirth:

> When I got pregnant she's always on me all the time and if you don't quit smoking that's my godbaby you're carryin, da da da this 'n that, but she basically helped me to quit when I was pregnant. . . . After I had her and I don't know maybe she was just so excited that the baby was there and she ain't have to worry about me no more ya know and she had her godbaby and that she didn't care what I did basically after that. But when I was during my pregnancy she was a big influence on me.

Sometimes family members' advice was unsolicited and seemed intrusive. Callie noted, "My aunt suggested that I shouldn't smoke and be around people that smoked and stuff and I had already told her that I had already made that decision that I wasn't gonna smoke." Sometimes the advice by family and friends was not direct but the message was still evident. Honey paused as she reflected that she had received anti-smoking messages during pregnancy "probably from my family and friends, I guess."

The generic "everybody"

Participants sometimes felt that "everybody" imposed restrictions against smoking during pregnancy. "Everyone said don't smoke, it will hurt your baby," Kesha related . . . "It was so hard. I knew it was wrong but I kept doing it, I kept doing it and it was getting harder." Kesha admitted that though she tried not to think about the harm smoking might cause to her unborn child, the messages she received disturbed her complacency and created greater conflicts about continuing to smoke. Sometimes the verbal admonitions against smoking while pregnant triggered an

unexpected response. For example, Beatriz delayed quitting until her last trimester. She attributed her quitting to verbal messages to quit:

> Everybody kept saying [the baby's] going to be premature, she's going to be sickly . . . and this is going to happen to her, that's going to happen to her. So I was just so sick of hearing it. I'm like, okay, I'll just stop.

She related the negative comments about smoking while pregnant also aroused her oppositional determination not to quit, which resulted in her delaying quitting. "I would've stopped myself, but by everybody saying, 'don't, don't, don't' you know that's the natural rebellion. You're saying 'don't,' so I have to [smoke]." Such an oppositional mindset is present when adolescents initiate smoking as a form of rebellion during individuation. The generic "everybody" message was summarized by Emma, "No one thinks it's a good idea to smoke when they're pregnant."

Health care providers

Participants expressed that negative messages about smoking during pregnancy from health care providers were a given, however, the intensity and specificity of the message varied. Some messages were general admonitions to quit smoking. Some health care providers delivered messages through brochures, posters, and smoking cessation classes. Natalie noted that the health department where she received prenatal care commended her for quitting smoking. Olivia said the first thing her doctor said when she got pregnant was, "You gotta quit." She added, "He was on me." Jamie was typical when she confided:

> Every doctor now a days says, 'don't smoke,' so you know I don't think I ever discussed it. You know I knew what she was going to say so I really didn't discuss it with her other than I think I probably said that it's hard not smoking and got some positive reinforcement.

Beatriz also related a familiar message from her health care providers:

> They told me to stop. They also told me it's hard . . . They were trying to put me in a smoking cessation class but when the class came around, I had lost the paper to find out what day it was and ended up not going . . . The first thing that came out of her mouth, [when I went back for an appointment was] "you didn't go to your stop smoking class."

At the other extreme was the very clear and direct message from Dallas' persistent, concerned physician when she went for her first prenatal appointment:

> "I do not want to treat you if you continue to smoke. I will not be your physician if you continue to smoke." And I said, "That's not a problem, it's just not a problem." And I guess how it's like any other addiction where you say it's not a problem until you try to do it and then it becomes an issue . . . my doctor has been on me for almost ten years to quit.

This physician threatened to withhold care if Dallas continued smoking. She acknowledged her doctor had been persistent in encouraging her to stop smoking through the years, but the pregnancy made the issue more urgent, "and that was her final straw, and rightfully so. I'm glad she put it to me that way, not that that would have had any effect on me quitting 'cause I already had it in my mind." For Dallas her physician was a respected influence in her life who was absolute on the issue of not smoking while pregnant. Dallas admitted pregnancy was the only condition for which she would quit smoking so she felt it was anticlimactic that her physician had placed so much emphasis on it, because she essentially considered it a "done deal." She admitted that it was a lot more difficult to accomplish than she had ever imagined.

The media

Participants mentioned different forms of the media as sources of imposed restrictions against smoking while pregnant. Media forms included books, posters, radio, television, advertisements, and the web. Radio and television influenced Olivia

to quit smoking while pregnant. Linda stated she had read "everything there was to know on the birth of the baby, child development and everything and smoking, all the cons that it had. So book knowledge, I knew it all. I knew what all the consequences were and everything." However, in the interview Linda answered questions about her knowledge about the effects of smoking while pregnant with vague and global statements. Even when asked to be specific, her answers remained elusive, so that it might logically be assumed that she was unaware of specific problems. However, Linda's answers reflected that she did know that smoking was harmful.

Kesha also acknowledged that she read a lot to learn about the effects of smoking during pregnancy, "I didn't do work throughout the whole pregnancy, so I read a lot of books." Jamie recalled that reading on the web and one ad influenced her deeply. "It's even more evil when you're pregnant, you know and when you're expecting. One thing to be selfish is to be selfish and your baby holding a cigarette in the womb, that ad." A poster of animals and a baby smoking was a strong counter message for smoking for Roz. She believed the poster may have hung in a science classroom. Honey derived her messages about quitting smoking while pregnant from living in Florida and, "all the exposure that has happened here in the last couple of years about these tobacco companies and litigation."

Participants noted messages inscribed on individual packs of cigarettes as a source of information that was concise and specific. Currently individual packs of cigarettes are inscribed on the outside with one of four basic messages that all begin with the words "Surgeon General's Warning:" followed by one of the following messages: "Smoking May Result in Fetal Injury, Premature Birth, and Low Birth

Weight," "Smoking Causes Lung Cancer, Heart Disease, Emphysema, & May Complicate Pregnancy," "Cigarette Smoke Contains Carbon Monoxide," and "Quitting Smoking Now Greatly Reduces Serious Risk to Your Health." Cartons of cigarettes are also inscribed on the outside with one of the Surgeon General warnings. Interestingly participants in this study rarely mentioned the messages on these labels, and when they did they seemed to minimize their influence.

Summary

The basic social psychological problem that emerged from the stories of addicted smokers was "imposed smoking restrictions during pregnancy." Women described their relationship to smoking as a kind of love story, a relationship that they were reluctant to give up in spite of the fact that they were pregnant. The smoking restrictions were the result of external social forces that have evolved over time into transforming smoking while pregnant into a social taboo. Significant others, family, friends, health care providers, and the media are the cultural messengers of the taboo.

Reconciling incompatibilities is the basic social psychological process that addresses the problem of imposed restrictions on smoking during pregnancy described in this chapter. The participants had to reconcile their strong desire to continue smoking during pregnancy while struggling with the social taboo that insists on stopping smoking. This basic social psychological process is presented in Chapter 5.

CHAPTER 5
RECONCILING INCOMPATIBILITIES — THE BASIC SOCIAL PROCESS

Imposed smoking restrictions during pregnancy, described in Chapter 4, is the basic social psychological problem experienced by pregnant women who smoke. Social taboos imposed restrictions intended to shelter and protect the fetus from harm. Women loved smoking and were addicted to cigarettes, but because smoking was considered a social taboo during pregnancy, pregnant women were assailed with admonishments to stop smoking from social messengers that included significant others, family and friends, health care providers, and the media. The social taboo that bombarded pregnant women with prohibitions against smoking became introjected and became an internal voice that joined with the other messengers proclaiming that smoking was taboo. This reflected appraisal becomes self-abrogating if the pregnant woman violates the taboo. This introjection was also externalized as the women themselves become messengers of the taboo and denounced other pregnant women who smoked.

Basic to the grounded theory method is the discovery of a core phenomenon or basic social psychological process which is both relevant and problematic, that accounts for most of the variation in a pattern of behavior (Glaser, 1978). The basic social psychological process that addressed the problem of imposed smoking restrictions during pregnancy was "reconciling incompatibilities." To reconcile is defined by *Webster's New World College Dictionary* (1996) as "to make compatible,

consistent." Incompatible is defined as "incongruous, conflicting, discordant." Therefore, reconciling incompatibilities is the process of making compatible two discordant or conflicting states. Active smoking and the state of pregnancy were incompatible states that had to be reconciled. Women were strongly attached to their cigarettes as objects of their love. Women acknowledged they had no intention of quitting smoking until "if and when" they became pregnant. Pregnancy, whether planned and anticipated or unplanned, was an obstacle to continued smoking.

Reconciling incompatibilities was a struggle for pregnant women. Their beliefs reinforced their determination to "pause" or not smoke while pregnant. They strategized to stop smoking and remain smoke-free during pregnancy. However, pausing was difficult and the lure of smoking strong. Some participants engaged in concealing behaviors to minimize consequences of the social taboo. Though secret smoking took place for some women, ultimately the participants ceased smoking for varying periods of time during pregnancy.

Reconciling incompatibilities is the basic social process pregnant women use to resolve imposed restrictions on smoking while pregnant. The rest of this chapter focuses on the five sub-processes of reconciling incompatibilities, which include focusing on the baby, struggling, strategizing, concealing, and, finally, pausing. These sub-processes occur over time, can occur simultaneously, are fluid, and can recur again and again before pregnancy culminates in childbirth.

Focusing on the Baby

The imposed restrictions from the social taboo against smoking warned pregnant women that they must stop smoking or harm or even death could come to their babies. Implicit in the taboo is that if they smoked they would be bad mothers. The incompatibility the mothers had to reconcile concerned the innocent, unborn baby and their perceived harmful smoking. Smoking while pregnant was taboo. Mother and child were inseparable. In their minds, mothers tended to maximize the possibility of potential harm to their babies and to minimize their own chances of harm from smoking. They viewed their own exposure to smoke as a choice willingly accepted as opposed to thrusting an innocent baby into a dangerous, smoke-influenced, in utero environment.

The motivation for the emphasis on smoking as harmful was derived from their personal beliefs about mother-inflicted smoking harm to their innocent, unborn child. Beliefs were translations of the prohibitions into assumed facts about the effects of continued smoking on the fetus. Beliefs of harm were both general and specific and often were uncertain. The patient did not always identify sources for the beliefs but this did not seem important to them. Even beliefs discounted by the participant carried the possibility of harm that contributed to the prohibition against smoking during pregnancy. The specific belief did not seem to be as important as feeling as though something harmful could happen to an innocent child and, no matter what, the baby had to be protected and the mother-to-be was the primary source of protection. Honey's experiences during her pregnancy reflected her belief system of choosing her

baby over smoking. Her pregnancy was a life changing event for her and her son's health was paramount:

> I knew, for his health, that if I was going to do this, that I was going to have to make some sacrifices and I knew that they were going to be tough. It was just, this is for him. He's innocent and he doesn't have these choices right now in his life.

Believing in the Innocence of the Baby

Self-determination was an internalized, strongly held belief that may have potentially contributed to the participant's initiation of smoking. However, the mothers reflected that their unborn children were innocent and essentially would become victims if mothers chose to continue smoking during their pregnancy. The right to choose was emphasized, almost like an unborn child's "Bill of Rights." Mothers acknowledged babies were unable to make their own choices about smoking and this dependence was the essence of their innocence. Alysha said she didn't smoke during her pregnancy because the baby does not have a choice, "Because it has something to do with her life. I don't want to mess up my baby's life 'cause she didn't ask to come here. If I did it, I am going to do it right for her." Ginny gave voice for her unborn son as she noted:

> The ultimate goal right away was to quit because I was pregnant, that was my main concern because I did not want to be, you know, a pregnant smoking person. . . . I thought the smoking would hurt him, you know. I did not want him to have any kind of complications. . . . I didn't want to smoke with him in there. . . . I just did not want to smoke while I was pregnant, because I make the choice to smoke, he wouldn't have.

Emma had come to terms with the harm smoking would inflict on her unborn child. She acknowledged that the combination of the potential harm and the lack of choice

that the baby has overwhelmed her and provided the determination necessary to stop smoking:

> Something that they can't control, something they can't control, damage that is being done to their body that they have no control over. . . . I love my babies and every time I looked at them I just couldn't do it. . . . I don't think it's their choice and I know that it's very bad on their lungs. It's very bad on their immune system, and it's just not good for them, so I don't.

Believing in the Potential of Harm for the Baby

Messages of harm came from numerous sources, or social messengers, that contributed to beliefs developed about smoking while pregnant. Beliefs about the effects of smoking on the fetus affected when the cessation would be attempted and added urgency or resistance to the cessation process. Participants all believed that smoking while pregnant was harmful and they wanted to avoid harm. Emma described smoking while pregnant as child abuse, "It seemed like abuse. It seemed like something which the child could not control and it seemed like it would be just as bad as me hauling off and smacking one of my kids."

Callie wanted a healthy baby. "So basically I sat down and decided what I was gonna do, ya know, and I just told myself, 'I'm pregnant. I want a healthy baby or whatever and I just gotta quit' and I just had to stop." Callie came to a point of reckoning. She believed continued smoking would be harmful to her unborn baby and she fully owned her responsibility in protecting her child, even from her own behavior. Fran had similar beliefs:

> I'm not smoking because of the baby. I don't want to hurt the baby. . . . It finally clicked in, you know. You can tell yourself anything you want to but

> you know that what you're doing, the baby is getting part of it too. And why do that?

The women acknowledged their internal dialogue which helped them come to terms with their incompatible roles of smoker and pregnant woman. They reached a turning point in their decision making that they chose the baby's health over their own love for smoking. In a real sense the decision to abandon smoking, at least temporarily, was a difficult decision to make. The participant had to take stock, reevaluate, revise, and re-judge the previously chosen path of smoker that now conflicted with the journey of becoming a mother. This developmental turning point was arrived at through a socializing process (Strauss, 1969). Turning points transform identity because they represent critical junctures of new self-conceptions that are often experienced with feelings of surprise, shock, anxiety, tension, and self-questioning. In the case of pregnancy, women's self-identity moves from "self" as an individual to the self as "mother." Decisions previously taken for granted have to be re-evaluated because of the inseparable plurality of being.

Participants related awareness that harm to the baby was possible if they smoked while pregnant. The beliefs about harm were sometimes expressed as generalities and other times were expressed as very specific beliefs about health problems. Interestingly, the specific beliefs were not always supported by current medical research.

General beliefs about harm

Some women expressed general beliefs about harm. Alysha summarized her beliefs in one sentence, "Smoking ain't good for your child." This was said confidently and in its brief, to the point simplicity, justified to the participant the need to stop smoking. Another participant, Linda, sounded as though she could recite details about effects of smoking on the unborn child:

> I had read everything there was to know on the birth of the baby, child development and everything and smoking, all the cons that it had. So book knowledge, I knew it all, I knew what all the consequences were and everything.

However, even repetitive tactful inquiries to obtain specific information were unproductive. Linda related her knowledge came from a child education specialist who provided books and tapes and helped her find resources to answer her questions. Satisfied with her own level of understanding, her beliefs contributed to her smoking cessation during pregnancy.

Specific beliefs about harm

Participants' beliefs about harm caused by smoking during pregnancy were sometimes specific to health problems, diseases, and particular body parts. Using comparative appraisals, participants drew conclusions from their awareness of other pregnant women's experiences. However, sometimes participants' beliefs about harm were erroneous and not validated by current medical research. Specific beliefs about harm were often related in a context of uncertainty and/or fear. Kesha expressed

specific beliefs about harm that may come to her baby if she smoked and connected her beliefs to outcome:

> I thought about a lot of things, you know like low birth weight, she could be little, she could have asthma, I mean she could have even died if I would have continued on smoking cause when I smoked, I smoked Newports and those were like the worst cigarettes so I had to do it for her. She's pretty tiny now, you know, and maybe that is from me smoking the first three months.

Kesha expressed feelings of guilt because she had a difficult time quitting. Her beliefs about her smoking both reinforced her need to quit smoking during pregnancy and evoked shame for possible harm she might have inflicted on her unborn child. Kesha noted she had read a lot of books that taught her about the effects of smoking and she had also discussed smoking with her healthcare providers at the clinic where she received her prenatal care.

Sometimes participants acknowledged their lack of understanding about how smoking causes specific health problems but affirmed their belief that harm does occur. Honey noted:

> I know that it [smoking] is attributed to miscarriages. I don't know what the direct link is, but I'm certain there is because you're breathing in all of these poisons. And I'm certain that from that commercial, there has to be some truth to it or I don't think they wouldn't air it on television, that it can also cause birth defects.

Honey felt the television commercial was a credible source of information and also stated the litigation with the tobacco companies that had been in the news provided another source for her information that smoking is harmful. On a personal level, she had a friend who was a nurse who also talked with her about the dangers of smoking and pregnancy.

Context of uncertainty

Participants accepted that smoking was harmful to their unborn child yet wavered about specific harm. They minimized specific harm to justify smoking. Missy found herself worrying and wondering about her smoking during pregnancy:

> I guess I felt guilty [for smoking while pregnant] but I don't know if that's what I want to use, that the baby was in there and I was subjecting the baby to that, but then again I thought, "Aw, it's not gonna affect him." I know that it can maybe possibly contribute to asthma . I don't believe that smoking while you're pregnant contributes to asthma. However, I do believe that smoking around your child after it's born contributes to asthma. I think that it can increase SIDS. . . . I don't believe that either, because while you're smoking while you're pregnant, because I know that's a genetic, predestined genetic disorder, so I feel that the child's already gonna die of SIDS whether the baby sleeps on its back or stomach. . . I think that it [smoking] affects it more after the baby is born than while you're pregnant. I know that the baby is getting less oxygen while you are smoking . . . it can probably cause brain damage.

Missy's internal dialogue vacillated as she restated what she had heard and then indicated to herself what she accepted and what she discounted. Her behavior was determined by what she believed and not by medical facts. Missy's statements reflected a context of uncertainty surrounding the effects of her use of tobacco during pregnancy as she wondered whether her smoking might have hurt her baby.

Olivia also seemed uncertain about her beliefs about harm. She initially related specific harm caused by smoking then disavowed it, stating research had disproved such and only low birth weight and breathing problems were threats to the baby:

> Low birth weight . . . there were a bunch of things being said. Like you know, it could be retarded or like not fully developed. And now, as you know, a few years down the road, the more research they do on it they found that the only cause they found that could harm the baby is low birth weight and maybe lungs, you know like, the baby could have, what is it? Asthma? Bronchitis? You know, it can trigger that a little bit higher than if you didn't smoke. . . .

> Well, they have breathing problems, I guess . . . they wouldn't develop right. I mean it could be all kinds of things like that.

Even in the context of wavering beliefs, Olivia quit smoking:

> I just felt that I had to quit for her, you know, and myself while I was pregnant, and it wasn't good for the baby so I quit. . . . I waited so long to have a kid and once I got pregnant I was just, every little thing with that pregnancy had to be perfect. I had to be healthy . . . Hmmmm, this pregnancy, I still want it [cigarettes], it's just that I'm not doing it because I know, you know, it's not good for the baby.

She acknowledged personal responsibility for harm if she had smoked during pregnancy, "I would be very upset and disappointed that I would had done this to my child, but I've never been there." Olivia also felt her source of information, her doctor, was legitimate because she noted:

> When I was pregnant with my daughter, he was on me every day. He's been my doctor for a long time and he was on me every day. "Stop, now you're stopped, don't start back." He always encouraged me, "Don't start back, don't start back."

She also remembered hearing information about smoking and pregnancy on the radio and television and from people in general.

The context of uncertainty extended to another participant who expressed conflicting, ambivalent beliefs about the effects of smoking while pregnant on her unborn child. Ivana hesitated as she listed effects of smoking while pregnant, "Small birth weight . . . lung effects . . . their lungs come out undeveloped and they have less chance of living." Although Ivana could list potential harmful effects, she also expressed some confusion about smoking. This doubt may have lessened her guilt as she delayed quitting. Ivana stated:

> At first I felt it was no big deal, it won't do anything. I thought it [smoking while pregnant] won't hurt the baby, the baby's in a sack. Not really being ignorant to the fact that we share the same blood. . . . You don't know whether it's going to harm the baby or not, you're juggling with it.

Ivana made this comment with a wry smile that insinuated she knew smoking was harmful to her child but pretending it was negligible made remembering that she had smoked during her pregnancy easier to live with.

Context of fear

Some participants beliefs about harm were drawn from comparisons and unknown sources that implied serious deformities or health problems, creating a context of fear for decisions about smoking during pregnancy. Roz had diverse beliefs about smoking effects on the unborn child that may have come from her college lectures in a psychology class on substances of abuse as well as a packet of information she received during a prenatal visit. Some of her beliefs were derived from drawing conclusions from friends' experiences and reflected deep concern about many potential impairments:

> Health problems that I've heard with babies . . . low birth weight, and you don't know what could happen. There could be other things tied into it, then maybe if I wouldn't have smoked then if you wouldn't be you know, deaf or something, so it's just a whole lot easier to not do anything. . . . Smoking causes low birth weight and as they get older they may be smaller or they may not grow as well and not do things that normal babies do. . . . A friend of ours has a son but he has a very, very bad speech impairment . . . his mom smoked during her pregnancy

Some of the specific beliefs about potential harm that came from smoking during pregnancy were erroneous beliefs that have not been validated through medical research. Fran's fears were nightmarish:

> I guess I was worried about maybe it'd come out with three arms or one eyeball. It's just those, you know, you have those bad dreams about stuff like that. I wasn't so worried about maybe his lungs weren't going to be developed, that never crossed my mind. It was more of a, maybe he's going to come out with a, you know, deformed somehow . . . something that I was going to visibly see and it was going to be my fault.

The effects on the lungs had scientific validity but did not seem as important to her as her admittedly, imaginary fears which more strongly influenced her choices to stop smoking.

Anticipating Not Smoking

As some of the participants focused on the baby and came to terms with the incompatibility of their current smoking behavior and the potential of becoming a mother, they began to anticipate not smoking. Foregoing smoking for some became contingent on pregnancy. This anticipated future smoking cessation was sometimes a personal resolution and sometimes a vow between partners, which in a sense was an excuse to delay quitting in the present.

Some of the participants actually made vows to quit smoking in the event of pregnancy. Missy made a personal resolution to stop smoking for her children because she wanted to be a better role model than her father had been for her. The personal resolution was not made with her spouse who was also a smoker. Missy reflected on her experiences growing up in a house where her father smoked:

> I knew that I wanted to quit before I even had kids because I knew that I didn't want to be an example for them, because my dad smoked, so they really couldn't say anything to me when they caught me smoking at sixteen. Because what is he going to say when he smokes? . . . I don't feel parents have the right to criticize their children when they smoke. I mean where do you think they're getting them from? Most of the time kids steal them from their parents. I used

> to take my dad's cigarettes. . . . So I wanted to quit before I got pregnant so I wouldn't be an example [of smoking] and I still don't want to be an example [of smoking] for my son.

Missy actually had quit smoking before becoming pregnant and had resumed during the first trimester before she knew she was pregnant. She quit again during the second trimester after a long period of smoking a few cigarettes on a daily basis.

Dallas noted that she had already set in her mind that if she ever became pregnant she would quit smoking. She viewed this as an absolute resolution and not a choice. She also remembered believing smoking cessation would just happen, "I would just quit smoking altogether." She also wryly admitted that she had not planned on becoming pregnant. The vow became reality when she became pregnant for the first time in her late '30s; suddenly the anticipation of smoking cessation became a personal obligation which created extreme anxiety when she attempted to implement her vow. Her non-smoking husband was aware of the vow and added pressure to her to stop smoking when he became aware of the pregnancy.

Another participant took a vow of anticipated smoking abstinence for pregnancy with her non-smoking spouse. Jamie and her husband mutually agreed that she would quit smoking when she got pregnant:

> My husband doesn't really like that I smoke but he was pretty supportive of it but that we both said as soon as I knew that I was pregnant that I was going to quit smoking so as soon as I knew, like as soon as I took the test, I quit smoking and it was pretty hard. . . . I just didn't want to, it was an arrangement that we had made and there was some medical things and we sped everything up so that we could get married and that we could try for a child so it was something we said obviously as soon as I get pregnant I'll quit smoking, so it was just that was the agreement.

Struggling

Reconciling incompatibilities required that participants not smoke during pregnancy. The social taboo of smoking and pregnancy imposed restrictions. The social messengers imposed prohibitions and contributed to beliefs that determined the timing and priority of not smoking during pregnancy. Many participants were caught off guard by the difficult struggles they had with stopping smoking. The expectation for some was that stopping would not be a big deal; some of the women did not perceive cigarette smoking as a real addiction. Other women clearly expected the difficulty and challenge of the struggle of stopping smoking for pregnancy, sometimes because they had previous quitting experiences with other pregnancies. Struggling reveals a shift to the self; struggling involves work. With struggling the participants face and endure the loss of smoking, which they love.

Dallas was unprepared for the difficulty of quitting. She decided to quit even before her pregnancy, however she was unprepared for the difficulty of quitting:

> It was horrible. It was worse than horrible. It was terrible. The first week was horrendous. . . I'm pretty stubborn and hard headed and I thought, "Naaah, I'm not going to need any help." And that's when I started cutting back and discovering it was going to be harder than what I had anticipated.

Olivia's struggles with not smoking began with tapering:

> I cut back on when I first found out I was pregnant. I was like four weeks. I had just found out. I found out early too and I just slow quit, just kinda like got to where I was smoking, like half of what I was smoking before. I went from a full pack to half a pack and maybe from half a pack and just slowly . . . I was still smoking like less than half a pack a day then finally I just said I gotta stop. I gotta stop now, and I was like in my second month of pregnancy. So I just stopped. . . . And believe me I wanted it [a cigarette], I was like just

> gimme a cigarette. . . . It's just this pregnancy, it's like I didn't want to stop. I just wanted to keep smoking.

Olivia's words reflect her ongoing inner struggle with the realities of her situation as she comes to terms with being a pregnant smoker. She verbalizes the incompatibility of being pregnant and smoking and clearly discovers herself in a dilemma.

Ginny also described a very difficult day that terminated her smoking:

> I said, "I just quit." I had the other pack in the car with me and you know, I've had a really rotten day. I think I'm going to smoke it and I said, "no" . . . I took the pack and threw it out the window and I just went back to work and that was the last cigarette I smoked. Not to say by the end of the day, I was like, where did I throw that pack out on this road? I bit people's heads off. It was tough, I mean it was really tough.

Ginny struggled with managing her stress after she quit smoking. The stress may have been connected to withdrawal symptoms as her body craved nicotine. Almost unknowingly Ginny was seeking that next "fix" from the familiar cigarette to keep going, but the struggle was unresolved because the familiar fix was no longer a choice.

Increasing Self-awareness

Pregnancy provided the context for stopping smoking. Most women had never attempted to quit smoking, unless they had previous pregnancies. In Chapter 4 women acknowledged craving cigarettes and using cigarettes as a fix, clearly words used to describe addictive substances. However, to many of the participants the struggle of quitting as they focused on the baby was a revelation that they were addicts and that their drug of choice was tobacco. The realization of being personally addicted to tobacco only became apparent when they struggled to give up smoking. Women described the shock of the difficulty of stopping smoking and compared it to other

addictions. Fran became aware of her own addiction but struggled to accept it as she contrasted her expectations of "real drug addiction" to the legally obtainable and readily available cigarette:

> It's hard when you quit like that. I mean you feel like you're coming off of drugs or something. It's hard, very irritable. You feel yucky and it's hard . . . I worked on quitting. . . It's awful, you know. It's bad. It's like being a drug addict, I think or worse. I mean it's so accessible, not like you have to go, you know, it's legal and everything else. Go right to the store and there it is. You don't have to hunt your guy you buy from or whatever, it's right there.

Missy also recognized her smoking as an addiction. "I think while I was pregnant, to see how terrible it is and how addicting it is. I guess it frustrated me." Honey also described smoking as an addiction, "Smoking is probably, I mean, it's the worst thing out there and it's so addicting." Dallas related she had studied addictions during college and had never perceived smoking as an addiction like alcohol or drugs. She summarized her ability to deny the addiction of smoking, "I said that's not a problem, it's just not a problem. And I guess how it's like any other addiction where you say it's not a problem until you try to do it and then it becomes an issue."

Pregnancy was usually the first and only projected context for stopping smoking. The participants were young and had often anticipated smoking for a long time. Lack of preparation to quit smoking, not seeking information to help with cessation, and the usual abrupt, impromptu methods for stopping may have made the experience more of a struggle. The struggle to stop smoking provided self-awareness that smoking is an addiction.

Gaining Strength from Spirituality

Spiritual beliefs positively affected the struggle for a few smokers. Quincy repetitively quit smoking for her first three pregnancies and went into her fourth pregnancy as a relapsed smoker. She expressed that she did not see smoking as a choice because of, "the spiritual issue of it, the moral issue of it, the health issue, and then on top of that being pregnant. I just could not do that [continue smoking]." Ivana confided her spiritual beliefs about smoking and pregnancy and took solace in a forgiving God:

> My thoughts are that it's wrong. . . .Your body is supposed to be your temple and your temple should be cool and you shouldn't put unclean things in your body that you could actually harm your body. . . .We're dealing with things that become a habit and demonic spirits. Those are the spirits you have to deal with because they are physically outside of you and we have no control over it so you have to ask the Lord to help you, just take it away from you."

Ivana shared, "Just asking the Lord to help me . . . that strengthens you and I didn't think about it [smoking] and replaced it with prayer."

Spiritual experience is often an integral component of addiction recovery programs. The philosophy of Alcoholics Anonymous (AA) is spiritually based and teaches the premise that members in recovery tap into an unsuspected inner resource which they identify with their own conception of a Power greater than themselves (Alcoholics Anonymous, 1976). The theory of AA suggested awareness of a Power greater than oneself is the essence of spiritual experience or, as some members refer to it, "God-consciousness." This higher Power is intimately woven into the philosophy of recovery from addiction in the "Twelve Steps," which have been used for recovery purposes for many addictions including eating, gambling, drugs, etc. The second step

of the Twelve Steps directly addresses the criticality of spiritual experience with the words, "Came to believe that a Power greater than ourselves could restore us to wholeness" (Friends in Recovery, 1987).

Serendipitous Morning Sickness

Normally women would not consider "morning sickness" a fortunate occurrence; however, the nausea made smoking aversive for smokers and helped mitigate the struggle. Kesha stopped smoking because felt she did not have a choice:

> Even after I found I was pregnant it was kind of hard to quit and I still smoked. And after about the third month it started making me sick and I quit. I couldn't smoke anymore . . . I was feeling sick. It was making me sick. It was kind of lilke the baby wouldn't take it. Every time I smoked a cigarette I would go "whommmppp." . . . I think I would have continued on smoking even though I knew deep inside that it was the wrong thing to do and I'm glad it made me sick, the smell even made me sick. I didn't want to be near it. I didn't want to look at [cigarettes], they were like the one thing I hated.

Emma said her first three pregnancies were easy for her to quit because of the nausea, "The cigarette smoke actually made me quite nauseous so it wasn't hard at all" [to quit smoking during pregnancy]. In her last pregnancy she took a medication for the nausea, which made smoking cessation very difficult. Emma waited until her third trimester to stop smoking for her fourth child admitting her lack of nausea made the struggle to resist cigarettes much greater. Natalie also admitted the smoke was aversive to her when pregnant:

> I didn't like the smell. You know it affected me real bad so I didn't like the smell so it wasn't like I was craving or anything like that . . . I didn't want nobody around me. If you smoked outside and you came in and I smell it on your clothes, I'd run to the bathroom and get sick.

She noted that stopping smoking during pregnancy was not difficult for her because the cigarette smoke made her nauseous, but after the nausea subsided, she chose not to resume smoking until after delivery.

A number of pregnant women found that the experience of pregnancy with the accompanying "morning sickness" was the bridge to stopping smoking with less effort. One participant even believed that nausea was the baby's way of stopping the smoking. "Morning sickness" would normally be considered an adverse reaction of pregnancy that had to be endured, but, paradoxically, smoking pregnant women described its occurrence as protective for the fetus because it interfered with the deleterious behavior of smoking. However, the struggle to not smoke during the rest of the pregnancy continued after the nausea had resolved. Women acknowledged that even with the support of spiritual beliefs and/or morning sickness, the never-ending struggle continued, sometimes on a minute by minute or an hour by hour basis.

Strategizing

Participants faced the dilemma of reconciling the incompatibilities of the health of their unborn babies and the power and love of cigarettes. Strategizing was the process that participants used to avoid smoking. Although strategizing implies a process of conscious planning to achieve a goal, sometimes the methods used to stop smoking were apparent only retrospectively as participants reflected on their experiences and related what had worked for them. Sometimes the strategies were very much a part of their awareness and they consciously chose to repeat techniques that previously helped them give up cigarettes, deal with the stress of not smoking,

and cope with the stressors of life. Women in the study stopped smoking during pregnancy without professional assistance or the help of nicotine replacement therapy, medications, formal classes or group support. Every woman found a path to stopping smoking which usually involved a combination of mental and behavioral strategies. Smoking cessation during pregnancy was both a logical and essential decision, but achieving a state of becoming smoke-free required strategizing.

Going Cold Turkey

"Cold turkey" is a slang term that means abruptly and totally withdrawing from an addiction such as drugs or tobacco (Neufeldt, 1996). Cold turkey can also imply quitting smoking without preparation or preliminaries. Honey's method provided a good example of the cold turkey approach to smoking cessation, "I opened up the window and chucked them right out the window. I just threw them and said, 'that's it." Honey quit "cold turkey" as soon as she learned she was pregnant, choosing the health of her baby over her desire to smoke. Linda quit cold turkey because cigarette smoking made her nauseous:

> I became so ill. I found out I was pregnant when I was about six weeks. Two days after I found out, it could have been a psychological thing, I became so ill. And I tried to smoke because like, I'm going to wean myself off of it and smoke less, but it just became a thing where I was so ill. I just quit.

Tapering

Tapering was a common strategy for reconciling the incompatibility of smoking during pregnancy. Tapering is defined as slowly decreasing the daily number

of cigarettes smoked over a period of time until cessation is achieved. Dallas said she used the "cutting back method." Alysha also used a similar technique:

> It took me awhile, I mean to slow down. I had to start cutting back because when I found I was pregnant, I was like a month and a half pregnant. It took me like a good month to actually stop, stop. I had to slow down. I had to train myself to slow down and then I was able to stop altogether . . . [I] stopped buying cigarettes, getting individual cigarettes . . . I stopped buying them, I stopped buying packs. If I buy the pack, I am going to smoke her. If I can get an individual cigarette here and there, whenever, I think that'll help me stop. So that's how I really did it.

Fran described her method of stopping smoking, "So I cut myself down and then I quit."

Substituting Food for Cigarettes

Probably because smoking is a hand-to-mouth activity, eating was frequently cited as a replacement for cigarettes. Ginny ate a lot during pregnancy because she perceived that eating was compatible with pregnancy, "I started to eat a lot because you know, what with being pregnant, it didn't matter." Emma admitted, "I just ate so much that I didn't need to smoke." Jamie struggled with not smoking and also found that eating was an acceptable substitute:

> It was pretty hard but for the most part of it [pregnancy] I quit smoking. I didn't have a cigarette at all for the first three months and then after that every once in a while I would have a cigarette. I ate a lot you know. I mean I was 145 when I started and I was 217 by the time the pregnancy was over so I mean I gained a lot. . . . I had blow pops, lots of blow pops. That is how I made it through. I have about six cavities so but you know that was about it. I just had to try to think about something else and breathe deep.

Jamie did not seemed shocked or concerned that the trade-off for not smoking was a significant weight gain of over 70 pounds and six cavities. That she quit smoking was

significant enough for her. Alysha experienced eating as a social activity that substituted for smoking during pregnancy:

> Well, I ate during my pregnancy anyway, but I ate more to keep something in my mouth, either chewed on my tongue, a piece of gum, anything. . . My best friend, that is the only thing we did my whole pregnancy she came and got me every day and we went to eat. We went to eat every day. We went to Denny's, the Grand Slam. I love the Grand Slam. She [the baby] had me just like eating out of control when I was pregnant. I ate everything, everything. I used to be happy eating it. Smiling and eating it.

Alysha's replacement for cigarettes was a high carbohydrate, high fat daily meal that she essentially blamed on her unborn child. Though participants acknowledged significant weight gain during pregnancy, not one of the participants expressed concern about weight gain as a reason to resume smoking during the postpartum period, even for those who did resume smoking. Participants cited eating as a pleasurable, oral substitute for the pleasurable, oral activity of smoking. However, the amount of food consumed and the type of foods indulged in were not considered by the participants.

Using Mental Imagery

Another strategy participants related was the conscious use of mental thoughts in the form of images that were meaningful to the participants and that diverted them from smoking and/or made smoking aversive. Mental imagery concerning the baby made a significant difference for a number of participants in their struggle to stop smoking during pregnancy. Ginny shared a mental strategy she used:

> When I was pregnant with him, something I would do for myself sometimes would be like, okay every time you take a puff of that cigarette you just think that your baby is smoking it. . . . If this baby were here right now, would you blow smoke in this baby's face? Why of course you wouldn't do that! That's what you're doing every time you smoke, you're doing that.

Alysha admitted as a matter of fact, "[I] just thought about my baby, whatever," as a way to avoid smoking during pregnancy. Alysha's mental image emphasized the health of her baby as she again refocused on her unborn child and avoided harm. Emma used real images, photographs, to construct negative mental images of child abuse that were aversive to influence her smoking during pregnancy:

> I could just look at my pictures of my other babies and know this is what's inside of me and I'm killing it, I'm hurting it, you know, and it's just to me that's the same as beating on your child or beating on a baby . . . it was really hard for me to smoke the last little bit of when I smoked during my pregnancy, because I felt like I was abusing her . . . because I was able to see her as a person.

Honey replayed memories in her mind as mental images to influence her smoking during pregnancy. She noted that her experience of a miscarriage with her first pregnancy motivated her to quit smoking as soon as she knew she was pregnant, "I didn't want to go through [a miscarriage] the second time . . . and because we didn't know if smoking was related to it or not."

Mental images of the baby in an aversive, smoky environment were often the stimuli for not smoking. Even just dwelling on the thoughts of the baby within was a helpful strategy for some participants not to smoke during pregnancy. Mental images evoked the possibility of harm to the baby, reinforced positive mothering behaviors, and served to delay the act of smoking when temptations arose.

Moving away from Smokers

Obtaining geographical distancing from other smokers was a coping strategy more often cited in the postpartum phase than as a strategy to stop smoking during pregnancy. However, when she was pregnant Callie realized that she needed to get away from her family influences that were making smoking cessation too difficult:

> I had to basically leave and get away from it cause as long as I was staying there I knew I was gonna try to smoke but then I had to think I was pregnant too so I kind of switched locations.

Participants used different strategies to avoid smoking while pregnant. Strategies were sometimes impulsive with little planning, such as going cold turkey to quit, and sometimes they were pre-conceived, such as tapering to stop smoking. Sometimes participants recognized that during the process of tapering or after they stopped smoking abruptly or after successfully tapering, they were able to avoid smoking by specific behaviors. Participants then chose to consciously repeat those behaviors to continue not smoking, such as eating instead of smoking or using mental imagery. Avoiding others who smoke was a strategy used when other techniques failed.

Concealing

Concealing was a behavior engaged in by some of the participants to minimize consequences of the socially imposed restrictions as a result of the social taboo. When concealing the women continued to smoke during pregnancy but either hid the act of smoking or deceived others in some way about being pregnant which reconciled the

incompatibilities of smoking and pregnancy for a selected audience. Concealing often occurred because of the tremendous struggles with stopping smoking and the failure of selected strategies. Smoking relapses resulted because of the strong craving for cigarettes, often uncertain beliefs about harm of smoking while pregnant in the context of wanting to protect the baby, and self-imposed strategies that participants initiated with minimal forethought. Sometimes concealing was chosen as a last resort to avoid loss of a health care provider or to avoid conflict in a relationship when the participant recognized she was going to break the prohibition against smoking while pregnant. Concealing permitted the participant to smoke a little more, often with the hope that it wouldn't really harm the baby and that she would stop altogether in the near future.

The imposed restrictions against smoking began as soon as the pregnancy was confirmed. The pregnancy became a concern for social interactions when it became known by others through word of mouth or became visible to others when the woman appeared pregnant. If the social taboo was violated by smoking while pregnant, the pregnant woman experienced negative consequences, usually in the form of verbal admonishments or body language that conveyed disapproval. Avoiding consequences was possible if the pregnancy was concealed and smoking continued or if the smoking was concealed while pregnant.

Participants who conceal smoking during pregnancy aimed to avoid stigmatization, which resulted in them becoming discredited. Concealing is equivocal to withholding information or keeping secrets. Though not all secrets are discreditable, all that is potentially discreditable seeks out secrecy (Bok, 1982). Pregnant women who smoke engage in "passing" behaviors when they lie about

smoking, hide their pregnancy, or non-disclose information that would label them as violators of the prohibition. Goffman (1963) described "passing" as the management of undisclosed, discrediting information about self in order to avoid being stigmatized. Passing involves concealing creditable facts which, if known, would make the person discreditable. In the case of pregnant, smoking women, it is the combination of pregnancy and smoking that makes the woman discreditable; either the behavior of smoking or the condition of pregnancy in isolation would not draw negative, discrediting, stigmatizing attention to the woman.

Concealing Smoking

Health care providers were social messengers of quit smoking advice given to pregnant women. Women often concealed their smoking status while pregnant to avoid an expected lecture or even potential loss of the professional relationship, as Dallas described in Chapter 4. Women concealed their smoking by either lying about their smoking or they became "closet smokers," essentially smoking in private.

Lying

Fran related her doctors had lectured her about smoking and pregnancy, "You know you shouldn't be doing that, this [smoking] can cause this problem [harm the baby's development]." She reflected, "And I know that and I didn't want to hear that side of it." When her doctors questioned her by asking, "You still not smoking?" She said, "Yeah, 'cause I felt I don't want to hear it. You know I have enough trouble." Then she realized she couldn't even ask about information about quitting because she had lied and she felt trapped and afraid:

> This is crazy, I've lied to the doctors and I'm too embarrassed to go back and tell them. I'm worried about I might be hurting [the baby] because I'm too scared to tell them, too chicken to tell him I'm smoking. I don't want to look like an idiot!

Because she was involved with in vitro fertilization, she believed smoking jeopardized her continued professional care, "I lied to the doctor. They wouldn't have done anything if I'd still been smoking." Dallas also initially lied to her doctor about her smoking because she rationalized that she was going to quit and also her doctor informed her that she would not continue to provide care for her during her pregnancy if she smoked.

Though lies are used to save face and avoid consequences, Bok (1978) noted that lies distort information and, therefore, lies distort situations and affect choices. Interestingly the lie of concealing smoking limits choices of health care providers in their provision of care. Bok (1978) noted that those who have been deceived are unable to act as they would have wanted to act had they known the truth all along. This implies that active intervention to help patients stop smoking is undermined if health care providers believe their patient quit smoking.

When she communicated by telephone, Missy lied to her out of town friends about smoking while pregnant:

> And when I was on the phone with them they would ask me every now and then, so have you been smoking? I'm like no [laughs and pantomimes smoking a cigarette while denying it while talking on the telephone.] I would tell them I have one every now and then but I wasn't gonna say, "Yeah, by the way, I'm having like one or two a day" cause it wasn't like I was smoking a pack a day.

Missy seemed annoyed that her friends would spy on her smoking only while pregnant by querying her on the telephone. She said that she had felt herself very clever by not admitting her obvious smoking and justified one or two cigarettes as negligible. She did not seem to appreciate the concern her friends had for her smoking potentially harming her baby, but she certainly felt they were imposing restrictions. Women's uncertain beliefs about harm of smoking while pregnant contributed to their justification that smoking was okay. Fran provides another reason why justification works because the consequences of smoking are often consciously suppressed:

> I even read in my little books, you know, the ones that say, well, smoking can harm its development [the baby's]. I don't even want to know. I don't even want to know. I am just going to pretend that I can't do any harm.

Concealing sometimes occurred in the process of obtaining cigarettes. At a store to buy cigarettes, Jamie remembered trying to conceal the fact that she was smoking by lying about who the cigarettes were for:

> I think I was about seven or eight months pregnant and I went into the store to buy cigarettes and people looked at me like I was the devil. It was pretty bad. I just said they were for my boss and nobody bought it. I kept them hidden under my seat in the car for like two weeks and then I moved them under the fish can behind the glass. You know it was this big drama, like if my husband found out, he'd kill me. . . . I was very, very pregnant. I mean I was huge and it wasn't like I could have been fat. It was a baby and people were just looking at me like, "How could you!"

Visibly pregnant, Jamie interpreted others silent reactions to her public purchase of cigarettes as admonishments.

Closet smoking

For this study closet smoking is defined as intentionally concealing smoking from designated observers to create the specific public image of a pregnant woman who does not smoke. In his acclaimed text, *The Presentation of Self in Everyday Life,* Goffman addressed the way individuals present themselves to communicate messages. He described the purposeful creation of an impression before a particular set of observers as a "performance" (Goffman, 1959). Pregnant women who continued to smoke privately presented themselves or "performed" before particular sets of observers with the intent of influencing their observers to avoiding having themselves labeled pregnant smokers.

Ginny refrained from smoking in public after she informed others that she was pregnant, "Once I told people I was pregnant, never did I smoke those couple cigarettes a day . . . in public. It was just something about me." Emma also admitted smoking in secret when she was pregnant, "I would never smoke in public [while pregnant]. I always did it off in a corner somewhere and if my boyfriend found out he would get on me a little bit about it." However, she remembered an incident when her daughter discovered her secret smoking:

> I went on the other side of the yard and I was around the corner when my oldest daughter walked up on me and it's, "Mom, you have a baby inside of you! What are you doing? You're poisoning my baby!" So I put it out and that was the last one I had.

Missy concealed her smoking when she felt her pregnancy had become obvious to others:

> But when I was smoking I sure didn't tell. When I started to show a little bit after I got home and I was smoking, like a cigarette, I didn't want anyone to notice that I was. I didn't want to smoke in a big place where people could tell I was pregnant and smoking. You know, I didn't want people, you know how people are, like, "She's pregnant and she's smoking," so I kinda hid it somewhat as much as I could from the public. My husband knew but I didn't want other people to know.

Missy also concealed her smoking while pregnant from friends who lived in another city. She admitted that when she was pregnant she didn't smoke in their presence when they visited.

Concealing Pregnancy

Women who were pregnant tried to pass as though they weren't in order to keep smoking without the consequences that were certain to come from violating the social taboo. Missy concealed her pregnancy when she smoked:

> Outside my apartment complex . . . my coat kinda wrapped around me so people wouldn't really know I was, they might think I was pregnant, but I didn't show too much then for sure. The fact, unless you were staring at me, you couldn't really tell at the time I was pregnant.

Linda acknowledged smoking at times while she was pregnant but felt her appearance concealed the pregnancy when she smoked:

> I think it was just mainly self-guilt. Because like with my first pregnancy, you couldn't tell I was pregnant until I was seven or eight months pregnant. . . . Nobody knew I was pregnant, so it was kind of like a self-guilt. I'd look around and think, well gosh, if these people knew that I was pregnant, how would they view me [smoking]?

Through the process of social interaction as described in Chapter 4, Linda viewed herself as a self-object, according to the theory of symbolic interactionism (Blumer,

1969). In her self-reflective statement she noted how others reacted towards smoking, pregnant women and then indicated to herself that they would also define her in a negative manner if they were to become aware of her pregnancy, thus defining herself to herself. American sociologist, Charles Cooley, described the social self, such as Linda's self-reflection, as a looking-glass self (Schubert, 1998, p. 164):

> Each to each a looking glass
> Reflects the other that doth pass.

Three principal elements are contained in this metaphor. The first element is the imagination of one's appearance to another person. The second is the imagination of that person's judgment about the appearance. Finally, a self-feeling, such as shame, is derived from the imagined judgment of the previous perceptions (Schubert, 1998). Concealing occurred because of participants' perceptions that imbued imagined negative judgments about others' beliefs regarding pregnancy and smoking.

Dallas concealed her pregnancy by withholding information. She noted she postponed informing her husband that she was pregnant for at least a week. She wanted to quit smoking on her own terms and didn't want his admonishments because of their mutual vow that she would quit if she ever became pregnant:

> The day that I found out [that I was pregnant] I was so surprised that it [quitting smoking] just didn't work that day. Then it went on and I didn't tell my husband for a week that I was pregnant because it was such a shock and I had to really think it over.

Pausing

Women have to reconcile the incompatibility of pregnancy and smoking to avoid social taboos. The ultimate reconciliation is to eliminate either the pregnancy or the smoking. Pausing is the term chosen to describe smoking cessation during pregnancy. Pausing is essentially the decision not to smoke during the pregnancy or at least during the portion of the pregnancy most critical to the pregnant woman as determined by the participant's interpretation about harm to the baby. The term "pausing" reflects the temporary nature of the smoking cessation because it is tied to the time-limited condition of pregnancy. The baby becomes the reason for smoking cessation. Honey noted how critical pregnancy was in interrupting her smoking career, "[If I hadn't become pregnant] I think that I'd still continue to be, you know, drink on the weekends and probably still smoking a pack of cigarettes a day."

Women stopped smoking during pregnancy but did not necessarily quit smoking permanently. Natalie reflected that she smoked before she became pregnant because, "I didn't have to stop [smoking] because I wasn't thinking about getting pregnant. . . . I just smoked until I got pregnant. I never thought about quitting . . . I didn't have the desire to quit." She stopped smoking early in the first trimester during her first two pregnancies and started smoking soon after giving birth.

Roz actually had anticipated quitting smoking if she became pregnant. She also anticipated resuming smoking after the baby was born, "When I get pregnant, I'm gonna stop, and them I'm gonna start again after, afterwards, you know." She acknowledged that this had occurred with her first baby. At three months postpartum

she had accepted single cigarettes from others but had not purchased a pack so did not consider herself yet a smoker.

Ginny described typical "pausing behavior" when asked whether she intended to stop only for the pregnancy or forever:

> I didn't have anything in mind. . . . I mean the ultimate goal right away was to quit because I was pregnant. That was my main concern because I did not want to be, you know, a pregnant smoking person.

The timing for pausing was influenced by participants' beliefs about when smoking was most deleterious to the baby. Jamie noted, "The first three months are definitely the most developmental months for the brain and everything else and you know it was better for me to go through that [stopping smoking] than hurt some part of its development." Jamie prioritized not smoking during the first three months because she believed that harm for the unborn child occurred during that developmental time. She said her sources of information included her "professional" husband and information from the web. Occasionally Jamie smoked a cigarette during the rest of her pregnancy, believing that she was not harming her baby at that time.

Emma's beliefs changed over the course of three pregnancies after conversations she had with medical staff which she met on her volunteer hospital job. She related:

> I didn't know as much then [with her first three pregnancies] as I do now and it was easier for me to quit, but now I know that not as much of it [smoke] crosses the placental barrier as what they like to tell you it does and it was a little bit harder to stop [smoking] this time. . . . I got to talking to some of the doctors and some of the nurses and the couple that were honest with me when I wasn't pregnant told me that it's somewhat like narcotics. . . . In the first six months of pregnancy the cigarette smoke does not affect the baby as much as the last three months and especially the last month when the lungs are actually

> drying, not drying out but attempting to mature. So it was harder for me the last month or so when I knew that I was doing more damage than before than when it was just nicotine going into the baby's system which would have possibly made him more active. . . . When I got to being six months with her I quit cause I figured I'd have her within the next month and my other kids were so premature they had apnea monitors, their lungs were premature and I did not want to risk her lungs not drying out, so when I was six months I quit.

Emma's decision to stop smoking was determined by her interpretation of some of the messages she received from doctors and nurses. Interestingly she apparently only validated messages that minimized the effects of smoking while pregnant and extended the zone of safety to the first six months. Though she had three premature babies, she did not connect her smoking to their prematurity.

Summary

The basic social psychological process that addressed the problem of imposed smoking restrictions during pregnancy was "reconciling incompatibilities." Women focused on their unborn child and came to terms with their beliefs about the harm of smoking delivered through social messengers and themselves. Participants struggled as they confronted their smoking addiction. Their struggles were influenced by their spiritual beliefs and mitigated by a common condition of pregnancy, "morning sickness." Participants found a path to stopping smoking through a combination of mental and behavioral strategies. A number of participants concealed their pregnancy and/or smoking as they realized the difficulty of their task and sought to minimize social criticism. Women finally reconciled their incompatible desires to smoke and to protect their unborn baby from their harmful smoking by "pausing." The timing and experience of pausing was influenced by the participants' beliefs about smoking and

pregnancy that sometimes, but not always, had scientific validity. Some women paused with the intention of remaining abstinent after delivery while most women paused and planned to start smoking at some point after delivery. Chapter 6 addresses the experiences of the postpartum women and their choices about smoking.

CHAPTER 6
RECONCILING INCOMPATIBILITIES — THE POSTPARTUM PERIOD

Chapters 4 and 5 discussed the basic social problem of imposed restrictions on smoking during pregnancy and how it is addressed by the basic social psychological process of reconciling the incompatibilities of smoking and pregnancy, including focusing on the baby, struggling, strategizing, concealing, and pausing. After delivery the mother and baby, once inseparable, now exist apart. Chapter 6 addresses the postpartum experiences of the participants as they reconcile becoming a new mother and their ongoing love affair with smoking. The participants feared potentially harming their babies when they were pregnant because their babies were believed to be exposed to cigarette smoke involuntarily when they smoked. Because the imposed restrictions were the result of a social taboo against smoking while pregnant, postpartum participants experienced a renewed sense of freedom to make personal decisions to resume smoking. Childbirth gave the baby a personal, protective space apart from the mother. After childbirth, smoking as a non-pregnant woman was not socially prohibited but smoking around the baby was. To reconcile the incompatibilities of smoking around a new baby, participants imposed rules for smoking around the baby, or they chose to not to smoke. Some participants extended the pause through breastfeeding.

Extending the Pause: Breastfeeding

For mothers who considered breastfeeding incompatible with smoking, nursing extended pausing (smoking cessation). Roz matter-of-factly stated, "Because I was breastfeeding, so I didn't [smoke]. Participants perceived breastfeeding almost as an extension of the pregnancy because of the close physical connection and the direct influence on the baby through breast milk. Participants related two significant beliefs about smoking and breastfeeding: smoking contaminated the breast milk and smoking interfered with the experience of physical connection between the mother and baby during breastfeeding.

Emma did not smoke as long as she was breastfeeding and was outspoken and direct in her beliefs about smoking contaminating her breast milk as she related, "Well, it goes straight through your breast milk, everything does . . . and I'm not an abusive parent. To me that is abuse." Olivia, who was pregnant with her second child, also described the sense that smoking contaminated breast milk, "I wouldn't breastfeed if I started back smoking, because the baby is still getting it, you know. Either way, whatever goes in me is gonna go in him." For Fran, extending the pause after delivery was related to the physical closeness of breastfeeding, "I didn't want to smell different to him when I was breastfeeding. I wanted him to know it was me."

Ending breastfeeding was the demarcation for some participants to resume smoking. During an earlier pregnancy Fran acknowledged resuming smoking as soon as she started her baby on formula, "Going to have to go to formula all the time, it was like that was my cue right there. I went right back to smoking." Breastfeeding was sometimes stopped early due to the desire to resume smoking. Natalie said, "I stopped

breastfeeding. I was like, if I'm gonna be smoking and if it's gonna be in my milk giving it to them, then I can stop and just put 'em on formula." Note the belief that Natalie has that formula feeding is healthier for her baby than breastfeeding and smoking. Professional literature does note that nicotine is passed through breast milk but the Committee on Drugs of the American Academy of Pediatrics believes the benefits of breast milk for the developing infant may outweigh the harm of smoke compounds in breast milk (American Academy of Pediatrics Committee on Drugs, 2001). Furthermore, infants may be more at risk if mothers smoke and bottle feed than if mothers smoke and breastfeed. Women commonly related re-starting smoking after breastfeeding or even terminating breastfeeding earlier than they desired in order to smoke. Breastfeeding is time limited; though it may extend the pause after birth, it does not assure continued smoking cessation.

Changing Restrictions Postpartum

The restrictions against smoking during pregnancy and the postpartum period were all about the baby. Not smoking around babies was, in essence, a social sanction. A sanction is the act of an authority confirming an action (Neufeldt, 1996); in the case of new mothers smoking, health care providers, family and friends, and the media are authorities that denounced the act of smoking around babies. During pregnancy when the baby was carried within the participant, smoking was off limits for the pregnant woman because the baby was believed to be directly affected. Breastfeeding also was perceived to maintain a direct connection to the baby and thus extended the pause, or smoking abstinence, for some of the participants.

Smoking restrictions changed following childbirth because of the separation of mother and baby. Participants related the sense of permission from others to resume smoking, however, participants expressed disapproval towards anyone, including themselves, who would smoke around their baby. Participants emphasized the need to respect the personal space of their children and considered cigarette smoke an intrusion into that space. As long as postpartum smoking restrictions of not smoking around children were followed, participants reflected a lack of concern for women smoking after childbirth.

Permission to Smoke

Dallas stated she did not see anything wrong with mothers smoking, did not have any bad feelings about smokers, and did not judge them. This is in contrast to her beliefs that pregnant women should not smoke. She added, "I don't think it's wrong to smoke. I personally don't feel there's anything wrong with people that smoke. My mom smokes, that's her choice." After giving birth to her baby, Callie experienced diminished social prohibitions when she smoked:

> When I got pregnant she's [godmother] always on me all the time, "and if you don't quit smoking, that's my godbaby you're carryin, da da da this 'n that." But she basically helped me to quit when I was pregnant. . . . after I had her and, I don't know, maybe she was just so excited that the baby was there and she ain't have to worry about me no more, ya know, and she had her godbaby and that she didn't care what I did basically after that. But when I was [smoking] during my pregnancy, she was a big influence on me.

Alysha also acknowledged a significant decrease in socially imposed smoking restrictions after delivery, although she admitted that she would have ignored restrictions anyway:

> When I was pregnant they told me, "No you ain't gonna smoke, you don't need to smoke"... but after I had my baby, they didn't really say anything anyway because they know I was gonna do it anyway.

Participants related the lifting of social prohibitions against smoking they had experienced during pregnancy and felt it was ok to resume smoking.

No Smoking around Baby

Participants were unanimous in their belief that it was wrong for anyone to smoke around babies and children. Some participants stated their health care providers encouraged them not to smoke, but if they did smoke they were instructed to smoke away from their babies and to minimize smoke smells around their babies. Dallas was firmly against smoking around babies and children, stating, "That's unacceptable. You can't do that!" and she could not think of any exceptions that would make it appropriate. She noted it would not happen for anyone to smoke around her child because she would get her baby out of the situation or remove the person smoking. She related the restrictions for smoking around children are because, "It is unhealthy for the children and the children are not making that choice."

Linda had concerns about smoke invading the personal space of her children as she vehemently declared:

> I never smoke directly around them [her children]. I thought if I am going to smoke, you know, even if it is just occasionally, or if it comes up that I do, then if it is going to affect anyone, if it is going to affect me, I don't want it to affect them.

Ivana was also definitely against smoking around children and also thought smoke invaded personal space, "Everybody should have their own personal space and we shouldn't invade it." She also noted she considered it "disrespect" to smoke around

her children, "you don't want them to pick up a bad habit and you don't want them to, you know, smoke.

Smoking restrictions changed in the postpartum period. Participants did not experience social disapproval for smoking after delivering their babies. They described smoking as a mother as almost no different than smoking before becoming pregnant, with the exception that it was absolutely unacceptable to smoke around their babies.

Ending Pausing

Pausing describes smoking cessation during pregnancy. The term "pausing" reflects the temporary nature of the smoking cessation because it is tied to the time-limited condition of pregnancy. Participants noted that societal expectations for smoking changed after delivery; they experienced decreased social barriers for smoking. Some participants experienced childbirth as liberating and resumed personal choices, such as smoking, that had been put on hold for the duration of pregnancy. Some participants resumed smoking unintentionally because they thought they could have a cigarette here and there and had not realized the power of their addiction. Participants justified smoking as a fix for their many stressors after childbirth and as part of an inevitable chain reaction to the presence of other smokers.

Childbirth as Liberation

Childbirth became a liberating experience for many of the participants. Childbirth liberated the women from the imposed restrictions against smoking that were present during pregnancy because they were no longer needed to protect the baby. Participants returned to their love affair with smoking. Roz's predictions of

resuming smoking after childbirth were expressed as a given, "When I get pregnant I'm gonna stop and then I'm gonna start again afterwards, you know." She went on to explain the rationale for her choice:

> Now there is nobody else to worry about, there is not a person inside of me to worry about, how is it gonna affect them. I know how it's gonna affect me, and all of that side to it, but you know, it's just like I'm endangering myself, I'm not putting anyone else in danger.

Jamie resumed smoking after delivery as a statement of liberation:

> It was like as soon as I could walk my butt out to the porch I was smoking a cigarette and it was funny because to me it was like it was a deal that I made with myself through the whole time. Like every time I wanted a cigarette when I was pregnant it was like, "You can smoke when you are not pregnant anymore," and I told people as soon as I'm not pregnant I'm smoking because everybody would make a big deal about the fact that I wasn't smoking.

Beatriz cajoled her friend into taking her downstairs to smoke the day after she had her baby. She reflected, "So I was like, OK, that kind of stressed me out [delivering the baby]. So I was like, 'Look, take me downstairs. I need a cigarette!'" Clearly these participants had no intention of permanently quitting smoking; they merely paused in their smoking career.

Smoking, But Not Really Smoking

Some participants stated they had resumed smoking unintentionally. They rationalized that they weren't really smoking because they were borrowing cigarettes and only smoking occasionally. They believed that they were no longer addicted to cigarettes because it had been so long since they had smoked and they could now choose when to smoke in very limited quantities, so it didn't really count. Linda noted when she picked up a cigarette after giving birth that she believed smoking "could be a controlled thing." However, she resumed smoking after the birth of both of her

children. Callie also gave herself permission to smoke one or two at a time after delivery, but surprisingly and unintentionally she found herself smoking again:

> Well, see I think that it was because I couldn't smoke for them whole nine months that I was pregnant I thought, "Ya know, well hey, maybe if I smoke one or two cigarettes they won't become addictive to me like it was before," but that didn't help and I think by me smoking that first cigarette that just make me wanna keep smoking. So I think that's basically how I started back up smokin' again.

Missy also thought she could just smoke occasionally after giving birth to her son and not return to her full blown addiction. However her social smoking triggered a relapse:

> I never intended to start back up again. And I was, so my assumption was, I can just smoke socially while I was home. Like I said, it becomes like ahhh, you just don't smoke on the weekends or socially when you're a smoker. It's like the worst addiction you can ever have! Heaven forbid my son start smoking, because I will kill him. . . . But anyways, so it wasn't like I intentionally started smoking fully.

Some participants believed that they weren't really addicted to smoking and the lengthy abstinence during pregnancy would have lessened their future daily consumption of cigarettes. Ginny even waited 11 months after her first baby was born before a stressful event triggered her to borrow a cigarette, and then she continued borrowing cigarettes. Ginny thought that as long as she didn't buy any cigarettes she wasn't really smoking. She reflected, "Well, I thought, maybe I, you know, I'm not buying any. Well I can just smoke one here and there. I'll be all right." She did not consider herself really smoking until she bought her first pack. Participants expected to control their smoking but found they were smoking in the same addicted manner as they did before pregnancy.

Justifying Smoking

Participants justified smoking as their method of dealing with the stress in their lives. After delivery they were confronted with significant stressors, which included conflict with their significant other, financial responsibilities, and being the mother of a new baby. Participants also justified their smoking as an inevitable behavior, or chain reaction, which occurred in the presence of other smokers.

Smoking, a fix for stress

Smoking was cited as a chosen, available, and familiar fix for stress. The stress came from many sources including taking care of a baby, relational conflicts with their significant other, boredom, career stressors, financial stresses, and stress trying to juggle multiple roles. Beatrix was direct in her assessment of her postpartum smoking, "After I had her I started stressing again and went back to smoking." Smoking was also Beatrix's fix for filling time, "But I feel like it's [smoking] actually the fact that you just don't have nothing else to do." Olivia self-prescribed smoking to calm her life:

> I honestly think it has a lot to do with stress and things like that. I think that has a lot to do with why I smoke. . . It's like when I'm upset it calms me down. . . I'll just sit there and smoke and I'll calm down.

Some participants admitted they did not know how to manage the stress in their lives and though smoking wasn't the best way to address stress, they admitted it helped with their feelings. Linda identified stress as her cause for smoking, "I think I may have had a few cigarettes here and there. Not habitual . . . just if there was a stressful situation. . . . When I have stress from different things . . . I would still pick up a cigarette now and then." Linda also suggested a means to stop smoking, "To me

I think what it is that I haven't found the right form of like de-stressing." But she is clear that her stress is pervasive and smoking is her first line of help:

> If it is to the point where it is a problem or a stress that just invades my whole body, I can just feel it from head to toe, and it has just been one thing after another it seems like then that's when I think about doing it [smoking].

Some participants connected the source of stress to their significant other and identified smoking as their source of relief. Callie described her resumption of smoking after delivery, "Every time I get the courage to quit, he either yakkin some stuff in my ear that I don't want to hear, he's stressing me out, or I mean it's something happens and I just don't never quit." Callie showed insight about her reasons for smoking and her relinquishment to the addiction:

> I thought maybe it [smoking] would kinda like ease the stress but it didn't, cause I mean stress is still gonna be there unless you deal with it the way it's supposed to be dealt with and I don't think cigarettes is the way to deal with it. But like I say, it turned into a habit now.

Kesha connected her smoking relapse to an argument with her baby's father but noted it was the stress of being a mother and feeling trapped with no way out that contributed to ongoing smoking:

> I was arguing with my baby's father on the phone 'cause he hasn't been there and he doesn't work and I have to support her . . . and I get to crying and I go outside and smoke a cigarette. . . . I was just thinking I couldn't deal with most of my problems . . . just like, why should I quit, you know. Thinking all negative about everything . . . I was thinking, why should I care about my health? Why should I quit? I have all these problems anyway. I might as well smoke. . . There was just so much stress, being young and being a mom and heaving to deal with all these issues.

For some participants smoking relapses in the context of stressful life situations were described as occurring almost without awareness, except in retrospect. Ivana

remembered that the day she resumed smoking after giving birth was the day both her mom and dad had a stroke.

Smoking, a chain reaction

Some participants expressed feelings of vulnerability when exposed to others smoking. Missy called this susceptibility to smoking a "chain reaction:"

> When one person lights up, everybody at the table ends up lighting one up. I mean if you go to a restaurant and you see a group of people sitting there and one smokes, you'll see them all smoking. You won't just see one person smoking, they'll all smoke. They have a word for it, a "chain reaction" . . . . It's just really hard to stay quit when you have to be around it.

Callie also acknowledged she was susceptible to start smoking when she was around others smoking:

> I was okay long as I wasn't around nobody that was smoking or whatever I was, "A okay." I tried and I tried and I tried not to smoke but then, 'cause like on the weekend everybody goes to my grandma house and then by everybody just sittin' around and ya know and one person fires up a cigarette and the next person, I just couldn't take it, so, and I think that's how I started back up.

Ginny admitted that her smoking relapse after the birth of her first child was the result of being around other smokers from her work setting, "It was being around people who smoked, again, with the mindset of, you know, it was fun, it's something that, it's socially bonding or something." Smoking relapse was justified by some participants as unavoidable when in the company of others smoking. Joining in the group by smoking seemed to enhance camaraderie and the sense of inclusion.

Postpartum Smoking Relapse Literature Review

Studies have shown that approximately 63% to 70% of postpartum women who quit smoking for even up to seven months relapse within one year after delivery (Fingerhut, Kleinman, & Kendrick, 1990). In a qualitative study narratives about

smoking relapse during the postpartum period reflected five storylines that had similarities to participants' experiences in this study (Bottorff, Johnson, Irwin, & Ratner, 2000). The story lines were identified after in-depth, open-ended interviews with 27 women who had also stopped smoking during pregnancy and had relapsed during the postpartum period. In one narrative women believed they could control their smoking by having a cigarette here and there; the overall theme was controlled smoking. Women in another narrative viewed themselves as vulnerable to smoking and felt they would always be smokers. Because of their strong personal identities as smokers, they were highly influenced by others smoking around them and emphasized the seriousness of their addiction. Another narrative revealed nostalgia for their lives before pregnancy and smoking cessation. Smoking from the past was viewed as adventurous and fun. Memories of smoking with other smokers were highly valued. Smoking relapse in another narrative was viewed as providing relief to manage emotions and stress. The final narrative from postpartum smokers related they never really quit smoking because they didn't quit for themselves but for the baby during pregnancy and therefore, they weren't bound to smoking cessation after delivery.

In the present study, similar results were identified. Some women in my study also believed they could maintain controlled smoking by smoking occasionally, but all acknowledged they relapsed to previous levels of smoking. Participants in my study also admitted they were vulnerable to others smoking around them and began smoking in the context of a "chain reaction." The nostalgia narrative in the previous study might be most closely tied to the love affair with smoking that many participants reported in my study. Finally, some participants also stopped smoking temporarily for

pregnancy, or "paused," with the full intention of picking up their lifestyle of smoking after delivery when they believed they could smoke in such a way as not to influence the health of their baby.

Another study identified postpartum high relapsers as "suspended smokers." The reasons identified for smoking cessation during pregnancy were related primarily to their babies' health and therefore were temporary in nature. This study focused on identification of the stages of change (described in the Transtheoretical Model in Chapter 2, Prochaska, Norcross, & DiClemente, 1994) related to smoking cessation and pregnancy (Stotts et al., 2000). This model has five distinct stages that are temporal and involve a series of tasks that must be completed before moving to the next stage, though completion of one stage does not inevitably lead to the next. The five stages include precontemplation, contemplation, preparation, action, and maintenance. In relation to smoking addiction, precontemplation is the stage where the person is not considering changing their smoking behavior and is least receptive to cessation interventions. Maintenance is the final stage in which smoking has not occurred for at least six months.

In the "suspended smokers" study pregnant women filled out a health questionnaire and evaluated the likelihood of continued abstinence after delivery. The perceived likelihood of postpartum smoking was reflected as a type of self-efficacy expectation. The highest percentage of the women who returned to postpartum smoking were in the precontemplation stage; percentages decreased with each subsequent stage, which would have reflected increasing involvement in the cessation process. Likewise, in my study, a pregnant woman who stopped smoking during

pregnancy could have been considered in the precontemplation stage if she essentially identified herself as "pausing" in her smoking career because of pregnancy but had no intention of remaining abstinent after delivery.

In my study women's expectations about resumption of smoking after delivery frequently did not coincide with their postpartum experiences. Becoming a new mother both contributed to smoking relapse for some, because of the stressors of mothering, and promoted abstinence for others, as they truly embraced their pivotal position in their families and came to terms with being a role model. It was very common for pregnant women to say they had no intention to resume smoking and believe their abstinence during pregnancy would be enough preparation to avoid smoking after delivery, only to return to smoking as a means to manage new stressors in their lives after delivery. External pressures seemed to exert considerable influences that were not fully comprehended until the participants experienced them. Because smoking was no longer taboo after delivery, relapse became an acceptable choice and the previous struggle to comply with social pressures, was relinquished. The stages of change model for pregnancy and smoking also needs to incorporate the significant external social influences.

Reconciling Incompatibilities in the Postpartum Period

Women quit smoking during pregnancy because of restrictions against smoking while pregnant. After childbirth, all participants eventually came to terms with restrictions against smoking around the baby; smoking as a non-pregnant woman was not socially prohibited. The basic social psychological process during the postpartum period shifted to become reconciling the incompatibilities of smoking

around a new baby and desiring to smoke. Participants chose either rules for smoking that respected the restrictions and smoked accordingly, or they chose a priority that was incompatible with smoking and did not smoke. Following rules for smoking allowed participants to smoke as long as they minimized the exposure of the baby to smoke or effects of cigarette smoke. Participants did not resume smoking when they valued other priorities in their lives that were incompatible with smoking and chose the other priority over resuming their addictive behavior.

Rules for Smoking

If the mother resumed smoking after childbirth, she followed self-imposed "rules for smoking," which insisted upon her smoking in a manner that aimed not to expose the infant to smoke and which also lessened exposure to the effects of smoke, such as the smell. Following "rules for smoking" minimized social criticism by honoring social sanctions against smoking around the baby, thus protecting the baby from the perceived harmful effects of smoking. "Rules for smoking" began with the smoking behavior of the mother; the new mother enforced smoking rules which extended the non-smoking perimeter around the baby to include others as well. However, for some participants adherence to the restrictions seemed to diminish over time as their children matured.

Spatial distancing

Distancing in this study refers to creating a smoke-free zone around the baby through purposeful behaviors. The participants related how they avoided smoking around their babies and also how they monitored the smoking of others in the vicinity of their children. Alysha was adamant about her own smoking behavior and that of

others, "I don't smoke around her at all. There wasn't no smoking around my baby. I don't have no kind of smoke around her." Callie also was acutely aware of her child's exposure to second-hand smoke and worked hard to minimize such exposure:

> I don't smoke around her. She's not around cigarette smoke or nothing like that and like basically when I smoke cigarettes she's not with me you see so it's like she's either with my cousin or my gramma got her or ya know somebody else has her. It's not like I smoke then I go get her.

Natalie distanced her smoking from all her children. She was almost proud and defensive as she described her vigilance in maintaining distance between her children and second-hand smoke:

> I wouldn't dare let nobody come in and smoke around the baby, because, you know, a newborn baby's not supposed to be around that. . . I never smoke around them [babies]. I don't come in the house and smoke, I'll go outside and smoke, because if I want to smoke a cigarette at one o'clock in the morning, I'll get up, light my cigarette on the stove, hurry up outside. I'll be smoking outside; it won't be in the house or anything. . . . I never smoked around her, never. I mean when she got old enough to walk or whatever she would see me smoking on the porch and she'll open the door and come out, you know. She'll be running out and I'll be like, "Get back, get back, go sit down!"

Distancing rules also stipulated designated smoking areas for some women. Participants frequently cited that they did not smoke in their houses and made the car off limits to smoking or chose not to smoke in their vehicles if their baby was present. Jamie noted, "I don't smoke in the car, when he's in the car, you know, I don't." Olivia also made her car off limits to smoking as she described her smoking rules for her first child, "I don't want her inhaling it [smoke], and anytime I was driving in the car and somebody wanted to smoke, 'No, you can't smoke in my car.'" Missy and her husband did not smoke in their house and avoided smoking in the car, "We smoke outside. When he [the baby] was in the car with us, we don't smoke in the car, so we

were really good about that." Olivia's house was also smoke-free, but only after she had her first baby. "Before I had my daughter, I smoked in my house and everything. But after I had my daughter, and I did start back [smoking], I never smoked in my house again," Olivia declared. Beatriz lived with her mother and she and her mother only smoked outside at different times, "cause one of us is always watching her." Emma also related designated smoking areas, "I smoke on the other side of the yard. Mommy never smokes in the house. . . . I don't smoke in any buildings. I always smoke outside."

Purification rules

Purification rules involved attempts to eliminate or alter the smell of cigarette smoke in the baby's environment and to avoid contaminating the baby by direct exposure to clothing and hands that had been exposed to cigarette smoke. Callie related her physician's advice about smoking:

> Before we left the hospital the doctor asked me if I smoked and I told him, "yea" and he told me that if I was to smoke, after you smoke or whatever, wash your hands and I would have to change my clothes because the baby could get SIDS, I think that's what they call it.

Emma noted, "I always wash my hands." She was concerned about the smell of cigarette smoke so instead of eliminating the smoke she tried to alter it, "I tried the Fabreeze at first, but that's a chemical and it caused my baby to get croupy. And I'm going, okay, I'm spraying a chemical on me to get smoke off of me, not a good idea."

Nursing mothers who did not view breastfeeding as incompatible with smoking did have rules of smoking to minimize effects on the baby, such as hours not

to smoke before and after nursing. Jamie didn't view breastfeeding as incompatible with smoking but did not smoke and breastfeed simultaneously. She also noted:

> I always wash my hands when I come in from smoking a cigarette you know because I breastfeed mostly and I don't want nicotine hands down by his mouth you know, other than that you know I don't smoke around him at all.

Missy also expressed concern for contamination with "nicotine" as she related:

> When we touch him, that nicotine is rubbing off on him and my husband put his stupid hand on top of his head last night, was just kinda doing this to him [demonstrates rubbing on head] and I like to rub my face in his hair and he smelled like a cigarette after he did that and so of course I got baby lotion and was rubbing it all over his head so he wouldn't smell like that.

Hand washing and/or an alternate fragrance (body lotion) rather than smoking cessation was the identified solution to "nicotine" contamination.

Relinquishing rules over time

The rules for smoking were often the most extreme immediately after delivery and seemed to diminish for some participants as the baby grew. Natalie showed insight about her changing rules for smoking, "I'm very strict around my babies when they first come home. You can't go in the house if you smoke, you can't hold my babies if you've got that certain tobacco smell on you." Missy also acknowledged relinquishing her rules as time passed, "Really after the first week or two smoking around him I stopped washing my hands every time I had a cigarette and brushing my teeth and making sure he didn't get any of the smell, 'cause after awhile you just don't think about how it's affecting your kids." Ginny noted how the rules of smoking changed as her first child grew older:

> With my first I wouldn't smoke in the car with him at all and then as he got older, I guess around two, I guess then I would smoke in the car with him. I know that sounds horrible but I would, the windows would be all down and everything, but I did, I got to the point where I would smoke in the car with him.

Olivia also related her stringent rules not to smoke in the car changed as her first daughter grew older, "Every now and then I would smoke in the car as long as all my windows were down, but she was probably like two or three by then."

Choosing New Priorities

New mothers who did not smoke chose new priorities that were incompatible with smoking. Choosing to be a good mother with all the responsibilities of creating a healthy, safe family environment and role modeling positive behaviors was experienced as incompatible with continued smoking. Coming to terms with smoking as an addiction and choosing not to continue to actively practice the addiction was another priority incompatible with smoking.

Choosing to be a good mother

One participant shared that becoming a mother was incompatible with smoking. Honey prioritized creating a healthy environment for her child and saw herself as a role model for her son and also for other children in the neighborhood. She stopped smoking early in her pregnancy, not viewing it as an option for her as a mother. Honey noted her concern for the effects of secondhand smoke on her son and reflected, "I thought about growing up in a smoking home and the ill effects of secondhand smoke. . . . I don't want my son to have any kind of effect." Honey's perception of smoking as an addiction began during her pregnancy through her experience of quitting, as she explained:

> It happened I think while I was pregnant. To see how terrible it is and how addicting it is. I guess it frustrated me. It really did frustrate me all that money that you waste . . . well you figure $100 bucks a month. That's shoot, my utility bill. . . . I decided that the money that I saved on cigarettes, and it is approximately $100 a month . . . and it goes into a fund for the baby and we'd like to see him go to college.

Ginny's vow not to smoke after the birth of her second child reflected her understanding the risks to her own health from smoking and her desire to not have her children grow up without a mother. "This time I have made a promise to my husband and to my son, I will not touch another cigarette. I can't, and that's the thing. I know I can't even touch one." Ginny noted she quit smoking during her first pregnancy five years ago and then fully relapsed eleven months after delivery. She noted after the birth of her second child she came to terms with her role as a mother and the threat that smoking posed. Simultaneously she also felt deeply connected to the death of her own mother when she was only nine years old. Ginny's cessation concerned her longevity and her role as a parent. She said a friend's daughter saw the participant smoking on her porch and pleaded, "Miss Ginny, you smoke cigarettes and you're going to die." She said kids learn that now in school and it made her feel horrible. She recognized smoking had potential consequences that were unacceptable and avoidable. Ginny declared, "I knew I had to do this [stop smoking] for me."

Another participant, Fran, also chose the priority of her health and avoiding harm over the pleasures of smoking. Health issues became very personal; harmful consequences of smoking became much more imminent and threatening to the participant as she assessed her contributions and her standing in her family. Fran chose not to smoke after having her baby though she acknowledged it was an ongoing

struggle. She was the mother of three children and related her husband was disabled. She viewed her role as mother and primary support for the family as critically important and saw smoking as a threat to her health and functioning, "I haven't picked it up cause then I started thinking, ok, if something happens to me, there's three kids and a husband, and I can't take that chance." Fran craved cigarettes but weighed the chances of losing her own health and the toll that would take on her family, "The fear of something happening keeps me from going out there and smoking." She used comparison of other's misfortunes to bring home the potential for her own risk factors:

> I have a friend whose father was just diagnosed with lung cancer. I don't know if he's alive today or not and I'm thinking, "Just because it hasn't happened to somebody else in my family, I would probably be the first. I might be the first one and I don't want that, not when I have my kids and my husband."

Choosing to face addiction

Quincy predicted she would have relapsed back to smoking after her fourth child if she had not gained new insights about smoking as an addiction and learned how to manage her stressors that triggered smoking. She noted her spiritual beliefs and new group membership in a chemical recovery group made smoking incompatible with her view of herself as a good mother and spiritual person. She believed cigarettes were an addictive substance that when actively used also caused spiritual harm. She valued her membership in the chemical recovery support group and was told if she chose to resume her drug of choice, she could no longer participate as a group member. Quincy noted she was pregnant and not smoking when she joined the chemical recovery group. Initially she had been encouraged to join the group by her husband and felt it wasn't really necessary because she wasn't smoking when she

joined. However, the group gave her reasons to become serious about her participation. She noted their words to her, "Well we know you're not smoking now because you're pregnant, but what we're gonna deal with is when you're not pregnant, we wanna get you to not smoke when you're not pregnant." Quincy's group experience shifted her relationship with smoking:

> We started studying the Bible and reading different scriptures and it became clear to me that that wasn't something that God would approve of. You know that there are scriptures in the Bible that talk about our bodies being the temple of God. . . . It became more of a moral issue with me, not just like it's bad and unhealthy, but on top of being bad and unhealthy, that it was also a moral issue. So it very much has to do with starting to attend church and reading the Bible and just coming to that conviction that it was wrong.

Quincy predicted the absence of tobacco in her future with cautious optimism:

> I can't tell you 100% I will never smoke again, but you know I can say definitely that I have more options and choices, people out there I can talk to. I have a lot more preventative measures that I would do.

Quincy viewed smoking as morally wrong after her group experience. She came to terms with smoking as an addiction that she described as possibly worse than some other illegal addictions. She stated the education she had about drugs in her support group changed her viewpoint. The group redefined smoking for her and also gave her tools to help her live without smoking:

> I don't have an escape, I don't have a chemical escape, you know, for problems or confrontations or issues or stresses or whatever. I mean I have to deal with it without the use of alcohol, tobacco, or anything, which is great because it teaches me to deal with the stress of life.

Dallas also came to terms with smoking as an addiction. She did not return to smoking because she did not want to ever go through the quitting process again. Dallas related that quitting smoking was one of the most difficult experiences she ever

had, "I was really addicted to smoking . . . I could never turn smoking off. I would leave the restaurant, I would leave the house, I would leave the scene and I would go get my fix." Dallas said she had never attempted to quit smoking before becoming pregnant and, "I never thought cigarettes were that big of a deal." Trying to quit smoking during pregnancy changed her beliefs about smoking as an addiction and gave her resolve to engage in the ongoing struggle not to smoke.

Participants who did not resume smoking after childbirth chose new priorities that were more important to them than their love affair with smoking. One priority incompatible with smoking was the choosing to be a good mother, which included assuming responsibility for the environment of the child, role modeling healthy behavior, and recognizing the personal health consequences of smoking that threatened the parental role. Another priority was coming to terms with smoking as an addiction and choosing to struggle with abstinence. The ongoing smoking cessation reconciled the incompatibility of smoking around the baby.

Summary

The basic social psychological problem of imposed restrictions against smoking while pregnant evolved to include restrictions against smoking around the baby during the postpartum period. Reconciling incompatibilities of smoking and the strong desire to smoke was finally resolved during pregnancy with smoking cessation or "pausing." After delivery the pause was often extended through breastfeeding because some participants believed breastfeeding was almost an extension of pregnancy. During the postpartum period participants reconciled incompatibilities of their desire to smoke and the imposed restrictions against smoking around the baby by

following rules for smoking or choosing new priorities incompatible with smoking, thereby honoring social sanctions against smoking around the baby. Following rules for smoking minimized smoke exposure and smoking smells to the baby. Choosing new priorities incompatible with smoking, such as choosing to be a good mother and/or choosing to face smoking as an addiction, permitted the mother to maintain smoking cessation in the postpartum period.

CHAPTER 7
SUMMARY AND RECOMMENDATIONS

Summary

Smoking during pregnancy is a major public health problem that endangers the mother and her fetus. Postpartum smoking is a continuing threat to both mothers and children. The purpose of this research was to develop a substantive grounded theory based on interpretations of the experiences of mothers who have smoked, stopped smoking during pregnancy, and made difficult choices about resuming or not resuming smoking after childbirth. Through the course of semi-structured interviews with 19 participants, a grounded theory was developed.

The basic social psychological problem that emerged from the stories of addicted smokers was "imposed smoking restrictions during pregnancy;" the restrictions derived from the social taboo of smoking while pregnant. The basic problem was addressed by the basic social psychological process of reconciling the incompatibilities of smoking and pregnancy through the sub-processes of focusing on the baby, struggling, strategizing, concealing, and pausing. The basic social psychological problem of imposed restrictions against smoking while pregnant evolved to imposed restrictions against smoking around the baby during the postpartum period. In the postpartum period the incompatibility of smoking around the baby was reconciled through one of two sub-processes: following rules for

smoking, which permitted smoking with certain restrictions, or choosing new priorities incompatible with smoking, which facilitated smoking cessation.

Recommendations for Practice

Enhancing Compliance with the Taboo

The social taboo against smoking while pregnant imposed strict smoking restrictions. The social taboo was potent enough for all of the participants to stop smoking during pregnancy; however, participants varied as to when they stopped smoking and were sometimes inconsistent in maintaining smoking cessation during pregnancy. Concealing smoking behaviors to suggest adherence to the social taboo and also to avoid social consequences of the forbidden behavior was a form of smoking non-compliance. My research suggests several ways to support compliance with smoking cessation for pregnant women.

Role of messengers of the social taboo

Pregnant women related their significant other was a messenger of the social taboo, but when the significant other smoked, stopping smoking and continued smoking cessation were more difficult. Participants described smoking as a "chain reaction" meaning that if one person initiated smoking, other smokers in the near vicinity would be drawn automatically into smoking. Significant others need strong messages that their smoking not only exposes their partner to environmental tobacco smoke but also places their partner's cessation at risk because of the "chain reaction" phenomena. Pregnant women need to learn to remove themselves from situations that might trigger the "chain reaction" of smoking if they feel at risk.

Smoking is a serious public health hazard and has been described as a chronic disease (U.S. Department of Health and Human Services, 2000). Health care providers are authoritative messengers of the social taboo. Participants related different experiences with their health care providers in addressing smoking during pregnancy and after delivery. Participants acknowledged lying about their use of tobacco to avoid loss of professional care and to avoid feeling stigmatized. Sometimes the lies prevented the participant from asking for help to stop smoking or even for clarifying the effects of smoking on their health or that of their children. Health care providers were inconsistent in assessing smoking and accepted statements about smoking status from pregnant women, even though it was known that pregnant women conceal their smoking. Every visit to a health care provider should be viewed as an opportunity for the provider to encourage positive health behaviors and should be used to assess current use of tobacco. Routine checking of smoking status has been encouraged as a "best practice" for health care providers and essentially becomes another "vital sign" to be measured and documented that provides valuable information about a patient's health status (U.S. Department of Health and Human Services, 2000). Pregnant women have been shown to frequently underreport their smoking behavior; routine measurement of carbon monoxide (CO) levels becomes the more accurate objective measurement of this behavior. Checking a patient's carbon monoxide level on each visit minimizes deception about smoking. The CO level is inexpensive and easy to determine and provides potential information about recent smoking status and/or exposure to environmental tobacco smoke which is also important for the health of the fetus.

Health care providers also need to be systematic in providing information about smoking and its effects on the fetus and newborn. The American Cancer Society's, *Fresh Start Family*, is an excellent program for pregnant patients and parents who smoke. The program includes a magazine which addresses smoking addiction, the process of quitting, some of the effects of smoking on the fetus and children, relapse prevention, and other related information in an easy-to-read format with pictures. The program includes a training program for health care providers to standardize the intervention. This program is currently being pilot tested in Florida and should become easily available in the near future.

Health care providers need to clearly communicate the dangers of smoking for the fetus, newborn, and mother in language that is understood by the patient. Many participants had incorrect information about the effects of smoke on the developing fetus; their perceptions influenced their behavior. Office videos and handouts about the developing fetus and effects of tobacco smoke would facilitate communication of correct information to women. Health care providers need to take a strong visible stand promoting smoking cessation for all patients to increase the percentage of women who become pregnant and are already free of tobacco. Visual images should decorate office settings to convey messages to discourage smoking. Posters and brochures about smoking as an addiction and health hazard need to be the norm in health care facilities.

At first glance, making smoking more socially stigmatizing for pregnant women and parents might seem to facilitate cessation. However, stigmatization may push patients to conceal behaviors, which did occur for some of the participants in my

study. If women feel stigmatized for smoking and have many sources of consistent information confirming that smoking is harmful to fetuses, babies, children, and themselves, they may be more self-motivated to abstain from smoking. Smoking cessation assistance today is available through telephone quitlines, web-sites, books, and support groups so that the health care provider is not the only source for cessation help if the woman feels self-conscious or stigmatized. The stigmatization of smoking while pregnant emphasizes even more the need for multiple sources of credible information and cessation support and funding for treatment.

The media was another messenger that was a significant influence on women's smoking choices. Images of babies smoking in utero aimed to enforce the social taboo against smoking while pregnant. These images, indelible in some participants' minds, served as strong deterrents to smoking. Images that evoke repulsion for smoking while pregnant need to be more visible. The dangers of smoking while pregnant should have more media exposure; public health television commercials can briefly air these images and newspapers can print clear messages.

Though cigarette packages carry words of warning, participants rarely mentioned their content; the warnings had little personal impact. Current messages on cigarette packs, such as, "Smoking May Result in Fetal Injury, Premature Birth, and Low Birth Weight" and "Smoking Causes Lung Cancer, Heart Disease, Emphysema, & May Complicate Pregnancy" are clear warnings but are often discounted by younger people. Because they are diagnoses that are often attributed to older people, younger smokers believe they will quit smoking way before they experience permanent harm. Maybe messages of current ongoing damage would be less easily

discounted, such as "Smoking Causes Skin Wrinkling," "Smoking Causes Difficulty with Breathing," "Smoking Causes Morning Cough," "Smoking Causes Yellow Skin," "Smoking Causes Bad Teeth" or "Smoking Makes You Gasp for Breath." The descriptor, "Low Birth Weight," did not always register as a serious risk factor and sounded innocuous to many participants; the implications of harm to the infant were often not fully acknowledged. Warnings on cigarette packages need to be direct and easily understood. Even adding broader messages about the social impact of smoking, such as "Each year tobacco kills more Americans than AIDS, alcohol, car accidents, fires, illegal drugs, murders and suicides combined" or "Since 1987, more women have died each year from lung cancer than breast cancer," might be useful in increasing the critical thinking of all smokers. Visual images of problems caused by smoking could be placed on cigarette packs, such as those found in Canada depicting rotting teeth or innocent children with the words "Don't Poison Us."

Role of educators

Participants often cited children as influences to quit smoking. They noted their children were upset with parental smoking because of school lessons about smoking as an addictive, harmful behavior. Children's accusations created dissonance in their parents' minds about their role as parents and about their own self-image. Information about the effects of smoking on fetuses and the overall effects of environmental tobacco smoke should be embedded in the curriculum in the education system for all children, beginning with elementary school.

From Theory to Practice: An Assessment Guide

The theory generated from this research can provide an outline for teaching nurses how to intervene with pregnant women who smoke. The theory and its components can be utilized as a general guideline to assess patients or can be formatted into a more formal assessment tool with the theoretical components serving as the basis for questions (Morse, Hutchinson, & Penrod, 1998). The patient responses to the theoretically guided assessment helps the health care provider in designing interventions.

During pregnancy, helping women focus on the baby should facilitate their quitting smoking. Nurses can explore with their patients their thoughts about their unborn baby. Questions posed could include, "Tell me about this pregnancy and your thoughts about your baby." The intent would be to determine the woman's maternal connection to the unborn child and her beliefs about the innocence and vulnerability of the fetus and desire to protect her baby. Patients can also be questioned specifically about their smoking choices and their beliefs about the effects of smoking on the unborn fetus. From these questions interventions can be derived, such as explaining the effects of smoking on the unborn child or determining smoking cessation strategies.

Struggling is fundamental to the smoking cessation process. Theoretically derived assessment questions can include questions about the role of smoking and stress in their lives. Support systems can be explored with the patient including their spiritual beliefs. Physiological effects of pregnancy, such as morning sickness, can be assessed to determine the potential effect on the quitting process. Interventions can

include stress management techniques and identification of support systems. Women need to understand the role of stress in their lives and learn how to change their lives to lessen their stressors or learn other coping strategies to live with what they cannot change. Healthy coping should lessen the tendency to replace tobacco with food and create the additional problem of obesity. Exercise, relaxation techniques, and even conflict resolution training would provide positive coping strategies that could be taught in scheduled prenatal and postpartum classes. Women need to work to decrease stress as a necessary condition for smoking cessation.

Strategizing how to stop smoking is necessary. Questions targeting this area include identifying methods for smoking cessation and identifying personal coping strategies that facilitate smoking cessation. Interventions could include providing supportive counseling and behavioral techniques to stop smoking. Assessing smoking status at every health care visit minimizes concealing smoking and if it is occurring, smoking can be supportively addressed with the goal of cessation. During pregnancy women should be questioned about their expectations for their smoking cessation and whether they are stopping smoking as a long term goal or just for the duration of the pregnancy (pausing). Issues of self-efficacy for maintaining smoking cessation can be identified as well as clarifying smoking addiction as a chronic condition, such that occasional social smoking would be considered a high risk behavior for relapse.

During the postpartum period nurses need to determine if their new mothers are justifying their smoking by establishing rules for smoking or whether they have owned new priorities in their lives that are incompatible with smoking. If patients relate they are smoking and feeling comfortable with this choice because of their rules

for smoking, nurses should create cognitive dissonance in their patients by warning about effects of environmental tobacco smoke and effects of the stale odor of smoke on children. Also, facts about the difficulty of sustaining rigid smoking rules should be shared with the clarification that the best health choice for all family members is smoking abstinence. The sub-process of choosing new priorities can be encouraged as women are facilitated to view their smoking behavior as role modeling behavior and as detrimental to their own health. The chronicity of smoking addiction can be explored with new mothers so that they make clear, informed choices about stress management in their lives and social affiliations that may place them at risk for relapse.

Creating a New Social Taboo

The social taboo against smoking while pregnant ended after delivery. Social sanctions replaced the social taboo and provided rules for smoking about when and where to smoke if the choice was made to smoke. The social sanctions restricting smoking should evolve into a social taboo against parental smoking for the best health outcome for the family. Though some participants mentioned disgust for women who smoked in enclosed spaces with children, smoking as a mother was not contraindicated and was strongly defended by some. Smoking by either parent has health effects on children. Pregnant women quit smoking but acknowledged that living with a smoker made the choice not to smoke more difficult to sustain in the postpartum period.

If it became socially stigmatizing to smoke as a parent, more parents might really attempt to stop smoking and not accept the alternative of being careful smokers

around others. If parents were held accountable for role modeling healthy behaviors, then it would not be good enough for parents to minimize environmental tobacco smoke around children. If parents also realized that their ability to physically thrive and participate in family activities is threatened because they smoke, maybe parents would seriously consider struggling with smoking cessation. Children's exposure to second-hand smoke was expressed as a concern, but the concern diminished with the age of the children for some participants. If smoking could become taboo for parenting, new mothers and fathers would have to seriously re-evaluate their choice to continue smoking. The same messengers that provided strong messages against smoking while pregnant would need to expand the message to include parental smoking. These realities are the basis for recommendations that aim to facilitate smoking cessation for women.

Recommendations for Research

- A qualitative study with smoking husbands of smoking pregnant and postpartum women focusing on their beliefs about their smoking and its physical effects on themselves, their wives, and their children as well as their beliefs about their influence as spouses on their wives use of tobacco.
- A study exploring the influence of children on smoking choices of their parents. This study could explore the effects of the age of children on smoking decisions of the parents.
- A longitudinal study over several years of women who smoked and stopped smoking during pregnancy and the influences that promote continued smoking cessation or contribute to relapse.

- A comprehensive stress management intervention with pregnant women who smoke to determine the effects on ongoing smoking cessation.
- A descriptive analysis of media presentations of smoking, pregnancy, and parenting.

APPENDIX A
RESEARCH FLYER

University of Florida Research Study

Lynnette Kennison, MSN, MA, ARNP, a doctoral student from the University of Florida, College of Nursing, is doing a study to learn more about how women who have quit smoking during pregnancy deal with smoking after their baby is born.

At this time I am looking for young mothers to interview who are 18 years of age or older. If you smoked before getting pregnant and quit within a year before you became pregnant you can participate or if you smoked before getting pregnant and if you quit smoking during the first half of your pregnancy, you may qualify to participate.

If you want to become part of this study, please call to arrange a convenient time and place to share your experiences. The tape-recorded interview will last less than two hours. Your name will not be used in the written research results. Compensation will be offered for participation in this study.

If you are willing to arrange an interview, please call Lynnette Kennison at (904) 982-7060. Tell her that you want to be part of the smoking and pregnancy study. Leave your number and Lynnette will call you back to schedule an interview.

APPENDIX B
DEMOGRAPHIC AND PERSONAL INFORMATION

Tobacco and Pregnancy
Personal Information

1. Age:_____

2. What is the highest level of education you have completed?
   ____ Did not graduate from high school
   ____ GED
   ____ High school graduate
   ____ Trade school or technical graduate
   ____ 2- year college degree
   ____ 4-year college degree (B.A., B.S. or equivalent)
   ____Graduate or professional study but no graduate degree
   ____Graduate or professional degree

3. Please circle your gender: male female

4. Race (Check all that apply)
   ____ American Indian/Alaskan Native (Eskimo, Aleut)
   ____ Black/African American
   ____ Oriental/Asian/Chinese/Filipino/Japanese/Korean/Vietnamese
   ____ Native Hawaiian or other Pacific Islander (Samoan, Guamanian, Chamorro)
   ____ White/Caucasian
   ____ Spanish/Hispanic/Latino/Cubano/Puerto Rican/ Chicano/Mexican
   ____ Other

5. What is your marital status?
   ____ Married or living as married
   ____ Separated and not living as married
   ____ Divorced and not living as married
   ____ Widowed and not living as married
   ____ Single, never married and not living as married

6. What is your total household income for the past year?
   ____ Below $10,000
   ____ $10,000-$20,000
   ____ $20,000-$30,000
   ____ $30,000-$40,000
   ____ $40,000-$50,000
   ____ $50,000-$60,000
   ____ $60,000-$70,000
   ____ Over $70,000

7. What is your current employment status? _____

8. What is your usual occupation? _____

9. How old were you when you first started smoking cigarettes fairly regularly? ____

10. For how many years altogether have you smoked daily? ____

11. How recently did you last smoke a cigarette? _____

12. Over the time that you were smoking the heaviest, about how many cigarettes did you smoke daily? _____ or packs of cigarettes daily_____

13. Which of the following approaches, if any, have you tried in your previous attempts to stop smoking (Mark all that apply)
   ____ Abrupt stop (cold turkey)
   ____ Nicotine patches
   ____ Nicotine gum
   ____ Nicotine inhaler or spray
   ____ Zyban or Wellbutrin
   ____ A formal cessation program
   ____ Support group
   ____ Hypnosis
   ____ Acupuncture
   ____ Other, please specify _____

14. Have you felt depressed or sad much of the time in the past year? _____

15. Have you ever received professional counseling, treatment, or medication for depression? _____

16. Does anyone you live with regularly smoke? (Please describe) _____

APPENDIX C
INITIAL INFORMED CONSENT

IRB# UFJ-2001-48

Informed Consent to Participate in Research

The University of Florida
Health Science Center
Jacksonville. Florida 32209

You are being asked to participate in a research study. This form provides you with information about the study. The Principal Investigator (the person in charge of this research) or representative of the Principal Investigator will also describe this study to you and answer all of your questions. Before you decide whether or not to take part, read the information below and ask questions about anything you do not understand.

1. Name of the Participant ("Study Subject")

2. Title of Research Study

A Qualitative Study of Postpartum Smoking

3. Principal Investigator, Address and Telephone Number

Lynnette Kennison
12972 Winthrop Cove Drive, Jacksonville, FL 32224
(904) 982-7060

4. Source of Funding or Other Material Support

None

5. What is the purpose of this research study?

This study is being done to learn about what influenced you to begin to smoke again after you had your baby or what influenced you to continue not smoking after the birth of your baby.

6. What will be done if you take part in this research study?

The Principal Investigator will arrange a location convenient for you to participate in this study. You will be asked to answer some written questions about your background and smoking experience. The Principal Investigator will then ask you about your smoking experiences before and after the birth of your baby as well as other influences that might affect your smoking choices. The interview will be tape-recorded and will last less than two hours.

7. What are the possible discomforts and risks?

There are no anticipated discomforts or risks in this study.

8a. What are the possible benefits to you?

There may be no direct benefit to you for participating in this study.

8b. What are the possible benefits to others?

The results of your participation will hopefully further our understanding of smoking habits in women who have recently had babies.

9. If you choose to take part in this research study, will it cost you anything?

There are no costs for participating in this study.

10. Will you receive compensation for taking part in this research study?

If you participate in an interview, you will receive $20.00.

11. What if you are injured because of the study?

There is no risk of harm when taking part in this study.

12. What other options or treatments are available if you do not want to be in this study?

Participation in this study is entirely voluntary. You are free to refuse to be in the study, and your refusal will not influence current or future health care you receive at this institution or any other medical facility.

13a. Can you withdraw from this research study?

You are free to withdraw your consent and to stop participating in this research study at any time. If you do withdraw your consent, there will be no penalty and you will not lose any benefits you are entitled to.

If you decide to withdraw you consent to participate in this research study for any reason, you should contact: Lynnette Kennison at (904) 982-7060. If you have any question regarding your rights as a research subject, you may phone the Institutional Review Board (IRB) Office at (904) 244-3136.

13b. If you withdraw, can information about you still be used and/or collected?

If you withdraw your consent to participate in the study, any information you have provided will not be used in the study results and further information will not be requested.

13c. Can the Principal Investigator withdraw you from this research study?

The Principal Investigator may withdraw you from the study without your consent because you did not meet the study requirements.

14. How will your privacy and confidentiality of your research records be protected?

Authorized persons from the University of Florida and the Institutional Review Board have the legal right to review your research records and will protect the confidentiality of those records to the extent provided by law. Otherwise, your research records will not be released without your consent unless required by law or a court order.

If the results of this research are published or presented at scientific meetings, your identity will not be disclosed.

15. How will the researcher(s) benefit from your being in this study?

In general, presenting research results helps the career of a scientist. Therefore, the Investigator(s) may benefit if the results of this study are presented at scientific meetings or in scientific journals.

Signatures

As a representative of this study, I have explained the purpose, the procedures, the benefits, and the risks that are involved in this research study, the alternatives to being in the study, and how privacy will be protected:

_____ _____

Signature of person obtaining consent Date

You have been informed about this study's purpose, procedures, possible benefits and risks, the alternatives to being in the study, and how your privacy will be protected. You will receive a copy of this Form. You have been given the opportunity to ask questions before you sign, and you have been told that you can ask other questions at any time. You voluntarily agree to participate in this study. By signing this form you are not waiving any of your legal rights.

_____ _____

Signature of Person Consenting Date

_____ _____

Signature of Witness (if available) Date

APPENDIX D
INFORMED CONSENT PREGNANT AND OLDER SMOKERS

IRB# UFJ-2001-48

Informed Consent to Participate in Research

The University of Florida
Health Science Center
Jacksonville. Florida 32209

You are being asked to participate in a research study. This form provides you with information about the study. The Principal Investigator (the person in charge of this research) or representative of the Principal Investigator will also describe this study to you and answer all of your questions. Before you decide whether or not to take part, read the information below and ask questions about anything you do not understand.

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3. Principal Investigator, Address and Telephone Number

Lynnette Kennison
12972 Winthrop Cove Drive, Jacksonville, FL 32224
(904) 982-7060

4. Source of Funding or Other Material Support

None

5. What is the purpose of this research study?

This study is being done to learn about what influenced you to begin to smoke again after you had your baby or what influenced you to continue not smoking after the birth of your baby.

6. What will be done if you take part in this research study?

The Principal Investigator will arrange a location convenient for you to participate in this study. You will be asked to answer some written questions about your background and smoking experience. The Principal Investigator will then ask you about your smoking experiences before and after the birth of your baby as well as other influences that might affect your smoking choices. The interview will be tape-recorded and will last less than two hours.

7. What are the possible discomforts and risks?

There are no anticipated discomforts or risks in this study.

8a. What are the possible benefits to you?

There may be no direct benefit to you for participating in this study.

8b. What are the possible benefits to others?

The results of your participation will hopefully further our understanding of smoking habits in women who have recently had babies.

9. If you choose to take part in this research study, will it cost you anything?

There are no costs for participating in this study.

10. Will you receive compensation for taking part in this research study?

If you participate in an interview, you will receive $20.00.

11. What if you are injured because of the study?

There is no risk of harm when taking part in this study.

12. What other options or treatments are available if you do not want to be in this study?

Participation in this study is entirely voluntary. You are free to refuse to be in the study, and your refusal will not influence current or future health care you receive at this institution or any other medical facility.

13a. Can you withdraw from this research study?

You are free to withdraw your consent and to stop participating in this research study at any time. If you do withdraw your consent, there will be no penalty and you will not lose any benefits you are entitled to.

If you decide to withdraw you consent to participate in this research study for any reason, you should contact: Lynnette Kennison at (904) 982-7060. If you have any question regarding your rights as a research subject, you may phone the Institutional Review Board (IRB) Office at (904) 244-3136.

13b. If you withdraw, can information about you still be used and/or collected?

If you withdraw your consent to participate in the study, any information you have provided will not be used in the study results and further information will not be requested.

13c. Can the Principal Investigator withdraw you from this research study?

The Principal Investigator may withdraw you from the study without your consent because you did not meet the study requirements.

14. How will your privacy and confidentiality of your research records be protected?

Authorized persons from the University of Florida and the Institutional Review Board have the legal right to review your research records and will protect the confidentiality of those records to the extent provided by law. Otherwise, your research records will not be released without your consent unless required by law or a court order.

If the results of this research are published or presented at scientific meetings, your identity will not be disclosed.

15. How will the researcher(s) benefit from your being in this study?

In general, presenting research results helps the career of a scientist. Therefore, the Investigator(s) may benefit if the results of this study are presented at scientific meetings or in scientific journals.

Signatures

As a representative of this study, I have explained the purpose, the procedures, the benefits, and the risks that are involved in this research study, the alternatives to being in the study, and how privacy will be protected:

_____ _____

Signature of person obtaining consent Date

You have been informed about this study's purpose, procedures, possible benefits and risks, the alternatives to being in the study, and how your privacy will be protected. You will receive a copy of this Form. You have been given the opportunity to ask questions before you sign, and you have been told that you can ask other questions at any time. You voluntarily agree to participate in this study. By signing this form you are not waiving any of your legal rights.

_____ _____

Signature of Person Consenting Date

_____ _____

Signature of Witness (if available) Date

APPENDIX E
SELECTED DEMOGRAPHICS OF PARTICIPANTS

Assigned Name	Age	Self Description	Educational Level	Marital Status	Annual Household Income
Alysha	24	Black/African American	Not High School Grad	Single	Below $10,000
Beatriz	22	Black/African American	Not High School Grad	Single	$10,000-$20,000
Callie	19	Black/African American	Not High School Grad	Single	Below $10,000
Dallas	38	White/Caucasian	4-Year College Degree	Married	Over $70,000
Emma	25	American Indian	2-Year College Degree	Married	$10,000-$20,000
Fran	35	White/Caucasian	2-Year College Degree	Married	$10,000-$20,000
Ginny	31	White/Caucasian	High School Grad	Married	$60,000-$70,000
Honey	37	White/Caucasian	Trade School Technical Grad	Divorced	$30,000-$40,000
Ivana	36	Black/African American	Trade School Technical Grad	Single	$20,000-$30,000
Jamie	26	White/Caucasian	GED	Married	$40,000-$50,000
Kesha	20	Multiracial	High School Grad	Single	$10,000-$20,000
Linda	23	White/Caucasian	High School Grad	Separated	Below $10,000
Missy	22	White/Caucasian	Trade School Technical Grad	Married	$20,000-$30,000
Nadia	21	Black/African American	Not High School Grad	Married	$30,000-$40,000
Olivia	29	White/Caucasian	Not High School Grad	Divorced	Below $10,000
Quincy	28		4-Year College Degree	Married	$30,000-$40,000
Roz	24	Black/African American	4-Year College Degree	Single	$20,000-$30,000

APPENDIX F
INITIAL INTERVIEW QUESTIONS

Postpartum Smoking
Initial Interview Questions

1. Tell me about how you began smoking.
2. Tell me about becoming pregnant and smoking.
3. Tell me about quitting smoking.
4. Describe influences to smoke.
5. Describe influences not to smoke.
6. Tell me about what stress means to you.
7. Tell me about what it was like not to smoke during your
8. pregnancy.
8. What were your plans about smoking after the baby was born?
9. What are your beliefs about the effects of smoking on the baby when you were pregnant?
10. Describe the first time you smoked after the baby was born.
11. What do you think would have helped you stay quit after your baby was born?
12. What was it like not to smoke after the baby was born?
13. How does smoking around your baby affect your baby after birth?
14. Tell me about your thoughts about smoking in the next month, 6 months, year?
15. What are your plans for your next pregnancy as far as smoking?
16. What would you tell other women about quitting smoking during pregnancy and after the baby was born?

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BIOGRAPHICAL SKETCH

Lynnette Hansen Kennison received her BSN from the University of Colorado, Denver, Colorado, in 1975; her MSN from the University of Florida, Gainesville, Florida, in 1984; and her MA in counseling from Liberty University, Lynchburg, Virginia, in 1998. She has been a psychiatric nurse practitioner in Florida since 1985. She has many years of clinical experience as an advanced practice nurse in psychiatry. She has also been involved in nursing education and has been very active as a leader in military nursing as an officer of the Florida Army National Guard.

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Sally A. Hutchinson, Chair
Professor of Nursing

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Alice H. Poe
Assistant Professor of Nursing

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

James P. Stansbury
Assistant Professor of Anthropology

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Mary F. Howard-Hamilton
Associate Professor of Educational Leadership, Policy and Foundation

This dissertation was submitted to the Graduate Faculty of the College of Nursing and to the Graduate School and was accepted as partial fulfillment of the requirements for the degree of Doctor of Philosophy.

August 2003

Dean, College of Nursing

Dean, Graduate School